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Wildlife Trafficking: the illicit trade in wildlife, animal parts, and derivatives. Illegaler Handel mit Tieren, Tierbestandteilen und Tierprodukten

Edited by: Ege, Gian Andrea ; Schloenhardt, Andreas ; Schwarzenegger, Christian

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Wildlife Trafficking

The illicit trade in wildlife,
animal parts, and derivatives

*Illegaler Handel mit Tieren,
Tierbestandteilen und Tierprodukten*

OPEN ACCESS

VOL 9

Gian Ege, Andreas Schloenhardt and
Christian Schwarzenegger (eds.)

Gian Ege
Andreas Schloenhardt
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Tierprodukten*

Edited by Daniel Hürlimann und Marc Thommen

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*Illegaler Handel mit Tieren,
Tierbestandteilen und Tierprodukten*

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Preface

Wildlife trafficking threatens the existence of many plant and animal species and accelerates the destruction of wildlife, forests, and other natural resources. It contributes to environmental degradation, destroys unique natural habitats, and deprives many countries and their populations of scarce renewable resources. The more endangered a species becomes, the greater is the commercial value that is put on the remaining specimen, thereby increasing the incentive for further illegal activities.

Preventing and suppressing the illegal trade in wildlife, animal parts, and plants is presently not a priority in many countries. Despite the actual and potential scale and consequences, wildlife trafficking often remains overlooked and poorly understood. Wildlife and biodiversity related policies, laws, and their enforcement have, for the most part, not kept up with the changing levels and patterns of wildlife trafficking. Poorly developed legal frameworks, weak law enforcement, prosecutorial, and judicial practices have resulted in valuable wildlife and plant resources becoming threatened. The high demand for wildlife, animal parts, plants, and plant material around the world has resulted in criminal activities on a large scale. Considerably cheaper than legally sourced material, the illegal trade in fauna and flora offers opportunities to reap significant profits. Gaps in domestic and international control regimes, difficulties in identifying illegal commodities and secondary products, along with intricate trafficking routes make it difficult to effectively curtail the trade.

Although several international and non-governmental organisations have launched initiatives aimed at bringing international attention to the problem of wildlife trafficking, political commitment and operational capacity to tackle this phenomenon are not commensurate to the scale of the problem. There is, to date, no universal framework to prevent and suppress this crime type and there is a lack of critical and credible expertise and scholarship on this phenomenon.

As part of their joint teaching programme on transnational organised crime, the University of Queensland, the University of Vienna, and the University of Zurich examined the topic of wildlife trafficking in a year-long research course in 2018–2019. Students from the three universities researched selected topics and presented their findings in academic papers, some of which have been compiled in this volume. The chapters included in this

edited book address causes, characteristics, and actors of wildlife trafficking, analyse detection methods, and explore different international and national legal frameworks.

This publication would not have been possible without the relentless enthusiasm and dedication of the student authors and supporting staff. Special thanks further go to Professor Felix Dasser for his financial support which enabled us to publish this volume.

Brisbane/Vienna/Zurich, April 2020

Gian Ege, Andreas Schloenhardt, Christian Schwarzenegger

Vorwort

Der illegale Handel mit geschützten Tier- und Pflanzenarten bedroht viele Spezies in ihrer Existenz. Er beschleunigt die Ausrottung von Wildtieren, die Zerstörung von Wäldern und anderen natürlichen Ressourcen und trägt zur Belastung der Umwelt bei. Einzigartige Lebensräume werden zerstört und Länder sowie ihre Bevölkerungen verlieren knappe natürliche Ressourcen. Je gefährdeter eine Tier- oder Pflanzenart ist, desto höher ist ihr Marktwert und damit auch der Anreiz, die verbleibenden Exemplare illegal zu handeln.

Zurzeit hat in vielen Ländern weder die Bekämpfung noch die Verhinderung des illegalen Handels mit geschützten Tier- und Pflanzenarten Priorität. Trotz der tatsächlichen und potentiellen Auswirkungen wird oft über wichtige Probleme hinweggesehen und das Phänomen bleibt wenig erforscht. Umfang und Struktur von illegalem Tier- und Pflanzenhandel sind einem ständigen Wandel unterworfen weshalb zu dessen Eindämmung vorgenommene politische Bemühungen, Gesetzgebung und deren Vollzug nicht immer Schritt halten können. Mangelnde rechtliche Rahmenbedingungen, schwache Strafverfolgung und mangelhafte Gerichtspraxis tragen dazu bei, dass geschützte Arten in ihrer Existenz bedroht sind. Die hohe Nachfrage nach Wildtieren, deren Teilen und Pflanzenmaterial hat weltweit zu grossflächiger krimineller Tätigkeit geführt. Im Vergleich zu rechtmässig gewonnenem Material ist der illegale Handel mit geschützten Tier- und Pflanzenarten deutlich profitabler. Eine effektive Eindämmung wird durch lückenhafte nationale und internationale Kontrollsysteme, Schwierigkeiten in der Identifikation von illegalen Spezies und Sekundärprodukten sowie komplexen Handelsrouten verunmöglicht.

Obschon verschiedene internationale und nichtstaatliche Organisationen Initiativen lanciert haben, um die Öffentlichkeit auf den illegalen Handel mit geschützten Tier- und Pflanzenarten aufmerksam zu machen, sind die daraus resultierende politische Entschlossenheit und Handlungsfähigkeit bei weitem nicht ausreichend. Es existieren derzeit keine globale Vorgaben, um diese Form der Kriminalität vorzubeugen und zu unterdrücken. Trotz erheblicher medialer Aufmerksamkeit und öffentlicher Debatte rund um das Phänomen existiert in der Wissenschaft nicht genügend entsprechende, glaubwürdige Expertise.

Als Teil ihrer gemeinsamen Lehrveranstaltung zur grenzüberschreitenden organisierten Kriminalität haben die University of Queensland, die Universität

Wien und die Universität Zürich 2018–2019 ein Seminar zum illegalen Handel mit geschützten Tier- und Pflanzenarten durchgeführt. Studierende der drei Universitäten haben zu ausgewählten Themen geforscht und wissenschaftlichen Arbeiten geschrieben, wovon die besten als Beitrag in diesem Sammelband veröffentlicht werden. Sie befassen sich mit Ursachen, Charakteristiken und Akteuren des illegalen Handels mit geschützten Tier- und Pflanzenarten, analysieren Entdeckungsmassnahmen sowie verschiedene internationale und nationale rechtliche Rahmenbedingungen zur Bekämpfung des Phänomens.

Die Realisierung der Lehrveranstaltung sowie die Veröffentlichung dieses Sammelbandes wären ohne die unermüdliche Motivation und Unterstützung der studentischen Autorinnen und Autoren sowie der involvierten universitären Mitarbeitern nicht möglich gewesen. Besonderer Dank gilt auch Prof. Dr. Felix Dasser für seine grosszügige Spende, welche die Veröffentlichung dieses Sammelbandes erst ermöglichte.

Brisbane/Wien/Zürich, im April 2020

Gian Ege, Andreas Schloenhardt, Christian Schwarzenegger

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Abbreviations

AELE	Association européenne de libre-échange (European Free Trade Association)
AFD	Administration fédérale des douanes (Switzerland)
art	Article
BAFU	Bundesamt für Umwelt (Switzerland)
CESNU	Conseil économique et social des Nations Unies
Cf	confer (latin), compare, vergleiche
CHF	Swiss franc
CITES	<i>Convention on International Trade in Endangered Species of Wild Flora and Fauna</i>
CMS	<i>Convention on the Conservation of Migratory Species of Wild Animals</i>
CoP	Conference of the Parties
Cth	Commonwealth of Australia
DNA	desoxyribonucleic acid
ECOSOC	Economic and Social Council (of the United Nations)
ed	edition
eds	editors
eg	exempli gratia, for example
EIA	Environmental Investigation Agency
EMRK	<i>Europäische Menschenrechtskonvention</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth)
EU	European Union, Europäische Union
EU-TWIX	European Union Trade in Wildlife Information Exchange
GRASP	Rapid Response Facility
IATA	International Air Transport Association
ICCROM	International Centre for the Study of Preservation and Restoration of Cultural Property
ICMM	International Council on Mining and Metals
ICOMOS	International Council on Monuments and Sites
ie	id est, that is
IFAW	International Fund for Animal Welfare
IUCN	International Union for the Conservation of Nature
IUFRO	Great Apes Survival Partnership
Hrsg.	HerausgeberIn(nen)
Lao PDR	Lao People's Democratic Republic
LCITES	<i>Loi fédérale sur la circulation des espèces de faune et de flore protégées</i> (Switzerland)
LEMIS	Law Enforcement Management Information System (of the US Fish and Wildlife Service)
Macau	Macau Special Administrative Region of China
SAR	
n	Note/footnote/Fußnote

NBSAP	National Biodiversity Strategy and Action Plan
NGO	Non-governmental organisation
OMD	Organisation mondiale des douanes (World Customs Organisation)
ONU	Organisation des Nations Unies
OSAV	Office fédérale de la sécurité alimentaire et des affaires vétérinaires (Switzerland)
RRF	Rapid Response Facility
SMART	Spatial Monitoring and Reporting Tool
TRAFFIC	Trade Records Analysis of Flora and Fauna in Commerce
UE	Union européenne (European Union)
UN	United Nations
UNCAC	United Nations Convention against Corruption
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNODC	United Nations Office on Drugs and Crime
UNTOC	<i>United Nations Convention against Transnational Organized Crime, Convention des Nations Unies contre la criminalité transnationale organisée</i>
USD	United States Dollar
USFWS	United States Fish and Wildlife Service
WCMC	World Conservation Monitoring Centre (of the UN Environment Programme)
WCO	World Customs Organisation
WWF	World Wildlife Fund for Nature

Chapter One

Wildlife Trafficking: Causes, Characteristics, and Consequences

ANDREAS SCHLOENHARDT

This chapter examines the causes and characteristics of wildlife trafficking, the demand and supply that fuel this trade, and the various activities that define it, ranging from poaching to consumption. The purpose of this chapter is to outline the causes, characteristics, and criminology of wildlife trafficking. The chapter provides a general understanding of the patterns and dimensions of this crime type and the difficulties of separating legal and illegal trade.¹

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¹ This chapter has been adapted from UNODC's Education for Justice (E4J) 'Illicit Markets for Wildlife, Forest & Fisheries Products' learning module, written by the same author in 2019 in support of the course from which the chapters in this book derive.

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I. Introduction

Wildlife trafficking includes the taking, trading, importing, exporting, processing, possessing, obtaining, and purchasing of wild animals, animal parts, and plants in contravention of international or national law. Wildlife trafficking threatens the existence of many animal and plant species. The more endangered a species becomes, the greater is the value of the remaining specimen, thereby increasing the incentive for further illegal activities. As a result, lucrative illicit markets for wildlife products span across the world. The fact that some trade in fauna and flora is regulated while some trade is prohibited provides ample opportunities for circumventing relevant laws and regulations. The loss of income from the legal trade in fauna and flora erodes the revenue of governments. When it is linked to organised crime, bribery, coercion, violence, or armed conflict, wildlife trafficking can corrupt national authorities and threaten the rule of law.

This chapter provides an introduction into the effects and drivers of wildlife trafficking, the patterns of illicit markets, and outlines the perpetrators and

their activities. Part II of this chapter outlines the implications of wildlife trafficking. Part III examines the difficulty with data documenting the scale of wildlife trafficking. Demand for and supply of trafficked wildlife are the subject of part IV. Next, part V looks at the perpetrators and networks involved in wildlife trafficking, before general observations about locations and activities relating to wildlife trafficking are made in part VI. The concluding part VII summarises the main observations of this analysis and paves the way for the following chapters of this volume.

II. Implications of wildlife trafficking

Threats to wildlife and plant species come from multiple sources, such as pollution, deforestation, destruction of natural habitats and climate change. Wildlife trafficking contributes significantly to these problems through poaching, harvesting, or depleting significant quantities of already endangered species. Wildlife Trafficking has far-reaching implications, not only for the animal and plant species involved, but also for human livelihoods, biodiversity, and governance.

1. Endangering species

Wildlife trafficking can diminish species populations and cause extirpations. When endangered species are involved, any poaching or harvesting of that species risks the species becoming extinct. Further worsening the problem is the fact that the demand for larger and more ornate specimens means that hunters and collectors often aim for the fittest individuals from the breeding population, with serious consequences for subsequent generations.²

² Gail E Rosen and Katherine F Smith, 'Summarizing the evidence on the international trade in illegal wildlife' (2010) 7 *EcoHealth* 24, 25.

2. Ecological costs

Wildlife trafficking contributes to biodiversity loss and can threaten ecosystem functions.³ Overexploitation can cause long term ecological problems such as creating sex-ratio imbalances and slowing the reproduction rate of vulnerable species. For example, elephant poaching of bull elephants (ie males with large tusks) has left a severe gender imbalance amongst African elephants. As a result, population recovery has been slowed because it has affected reproduction rates.⁴

Population decline is further problematic if keystone species are affected by illicit trade. Keystone species have ‘a significant direct and indirect effect on their surrounding ecosystem and other species within that ecosystem’.⁵ Sharks, for example, have a central role in oceanic systems by preying upon smaller fish. As a result of shark finning that has decimated shark populations globally, populations of smaller fish have significantly increased leading to a decline in shellfish.⁶ With regard to destructive fishing practices, cyanide and dynamite are used at times to capture fish by stunning them, but can also kill many other nearby fish and destroy coral reefs that provide a habitat for many aquatic species.⁷

3. Animal welfare

Many endangered species are fragile and require expert and delicate handling. Yet, the methods used by poachers to kill or capture animals and the way animals are handled are often extremely cruel and fail to comply with animal welfare standards. Many transportation and

3 Steven Broad, Teresa Mulliken and Dilys Roe, ‘The Nature and Extent of Legal and Illegal Trade in Wildlife’, in Sara Oldfield (ed), *Trade in Wildlife: Regulation for Conservation* (2012) 3, 3.

4 Joseph Saragusty et al, ‘Skewed birth sex ratio and premature mortality in elephants’ (2009) 115(1) *Animal Reproduction Science* 247, 251.

5 William D Moreto and Stephen F Pires, *Wildlife Crime: An Environmental Criminology and Crime Science Perspective* (2018) 19.

6 Francesco Ferretti et al, ‘Patterns and ecosystem consequences of shark declines in the ocean’ (2010) 13(8) *Ecology Letters* 1055, 1062 – 1063.

7 Kate McClellan, ‘Coral degradation through destructive fishing practices’, *The Encyclopedia of Earth* (Web page, 24 August 2008).

concealment methods are harmful to animals.⁸ The ways in which some animals and plants are caught, transported, and kept frequently cause injury, death, or attrition, resulting in further losses especially when living animals or plants are trafficked.⁹ Indiscriminate methods used to catch animals, such as cyanide fishing, can also harm and kill non-target species, deplete fishing populations, and damage ecosystems.¹⁰

4. Threats to other species

Beyond the direct negative biological impact on specific species, the illegal wildlife trade can have indirect impacts from a conservation perspective. The two most obvious examples are detrimental by-catch of non-target species and the introduction of harmful alien species into a habitat. Examples of detrimental by-catch are particularly well known from the fisheries sector: Nets, lines, and other fishing gear used to catch the desired fish of catch everything else in their path, including turtles, dolphins, and juvenile fish. For example, the vaquita porpoise which can be found in Gulf of California frequently gets caught in nets used to catch another endangered species, the totoaba macdonali fish. Totoaba is a delicacy in Asia and it is smuggled from Mexico through the United States to China and other destinations.¹¹ Terrestrial examples include impacts on non-target species from activities such as logging and waterfowl hunting.¹²

8 Rosen and Smith (n 2) 25, 27.

9 UN ECOSOC, Commission on Crime Prevention and Criminal Justice, *Illicit trafficking in protected species of wild flora and fauna and illicit access to genetic resources, Report of the Secretary-General*, UN Doc E/CN.15/2003/8 (4 March 2003) 9 [26]; See further Sandra E Baker, 'Rough Trade: Animal Welfare in the Global Wildlife Trade' (2013) 63(12) *BioScience* 928 – 938.

10 See further Laura E Dee, 'Conservation and management of ornamental coral reef wildlife' (2014) 169 *Biological Conservation* 225 – 237.

11 Caterina D'Agrosa et al, 'Vaquita Bycatch in Mexico's Artisanal Gillnet Fisheries: Driving a Small Population to Extinction' (2000) 14(4) *Conservation Biology* 1110 – 1119; Armando Jaramillo-Legoretta et al, 'Saving the Vaquita: Immediate Action, Not More Data' (2007) 21(6) *Conservation Biology* 1653 – 1655.

12 Broad, Mulliken and Roe (n 3) 4.

5. Biosecurity risks

Wildlife trafficking may introduce viruses, bacteria, or species to places where native populations are not adequately resistant.¹³ Exotic species that are smuggled can pose a biosecurity risk because they can potentially establish themselves in the wild and become pests. They can also carry seeds, parasites, and viruses which, if released to the environment, would have negative impacts on native wildlife, and on the agriculture, horticulture, and aquaculture industries.¹⁴ Negative impacts of alien species introductions caused by wildlife trafficking are not well documented; some of the more problematic examples have been linked to deliberate movements of ornamental plants and game fish species outside their natural ranges.¹⁵

6. Threats and violence

Poachers and hunters are frequently armed with guns or other weapons that are used to kill, capture, or collect wildlife, or are employed against officials or local people who protect or live in close proximity to endangered animals or plants. Over the last decade, some 1000 rangers have died in the line of duty in Africa alone.¹⁶ Threats and violence rise and often escalate—along with the scale of depletion—if criminal organisations become involved in wildlife trafficking. This also heightens the risk of corruption at many stages of the illegal wildlife trade.¹⁷ Moreover, increased militarisation of anti-poaching efforts can sometimes lead to ‘shoot first’ policies that can ultimately lead to more deaths of potential offenders and escalate violence between those on the frontline and locals.¹⁸

¹³ Rosen and Smith (n 2) 25.

¹⁴ Erika Alacs and Arthur Georges, ‘Wildlife across our borders: a review of the illegal trade in Australia’ (2008) 40 (2) *Australian Journal of Forensic Sciences* 147, 147.

¹⁵ Broad, Mulliken and Roe (n 3) 4–5.

¹⁶ Nuwer, 2016.

¹⁷ Rosen and Smith (n 2) 25.

¹⁸ Moreto and Pires (n 5) 22.

7. Economics and governance

Wildlife trafficking undermines and threatens the ability and efforts by States to manage their natural resources. It can result in severe economic losses, which particularly affect developing countries that rely on revenue generated by legal trade.¹⁹ Wildlife trafficking can threaten rural livelihoods where people's subsistence and income rely on wildlife, including those based on ecotourism.

Wildlife trafficking can undermine administrative systems and, in some cases, threaten national stability. The United Nations (UN) Security Council, for instance, has repeatedly expressed concern that the internal armed conflict and widespread breakdown of law and order in the Central African Republic was fuelled by armed groups and criminal networks that benefited from illicit exploitation of natural resources, including wildlife and wildlife products, in that country.²⁰ Several reports also document the impact of land clearance for mining operations and infrastructure projects on local animal species and humans in the Democratic Republic of Congo. Many of the affected areas are home to endangered mountain gorillas that are displaced, lose their food supply, or that are poached for use as bush meat that is then sold to miners and armed groups.²¹

III. Data

1. The difficulty with data

Reliable data is essential to properly understand the scale and characteristics of wildlife trafficking and for the development of effective countermeasures.

¹⁹ Rosen and Smith (n 2) 25.

²⁰ UN Security Council, *Report of the Secretary-General on the situation in the Central African Republic*, UN Doc S/2013/261 (3 May 2013) 6 [29]; UN Security Council, *Report of the Secretary-General on the situation in the Central African Republic, 15 June–15 October 2018*, UN Doc S/2018/922 (15 October 2018) 4 [15].

²¹ Nigel South and Avi Brisman, 'Critical Green Criminology, Environmental Rights and Crimes of Exploitation', in Simon Winlow and Roland Atkinson (eds), *New Directions in Crime and Deviance* (2013) 99, 105; Christian Nellemann et al, *The Last Stand of the Gorilla: Environmental Crime and Conflict in the Congo Basin* (2010) 63.

In most places, data and other information about the levels and patterns of wildlife trafficking are, however, at best fragmented. ‘For a wide variety of reasons,’ note Steven Broad, Teresa Mulliken and Dilys Roe, ‘it is not easy to quantify the world’s wildlife trade. Local use of wild plants and animals may account for the majority of global wildlife trade in terms of trade volume and perhaps even value’ but much of this trade is carried out through informal trade networks and not recorded in available statistics.²² ‘Even the more structured aspects of domestic trade in wildlife commodities, between regions within a country and to supply urban markets, is seldom closely monitored and even where it is, statistical records of trade volumes and values are dispersed and difficult to compile’.²³

A report presented to the United Nations Commission on Crime Prevention and Criminal Justice (CCPCJ) noted that:

In spite of the widespread tendency to attempt to estimate the size of such illegal markets, many of which are described as second only to drugs or, in some cases, to drugs and arms, there are few reliable statistics. Efforts to estimate the size of the illicit market in fauna and flora encounter enormous problems. There are several layers of uncertainty, which, in many respects, are irreducible: the number of animals or plants in the wild, the number that are illegally but successfully trafficked to customers, the percentage of those trafficked that are intercepted and the prices that are paid. Moreover, there are multiple sectors and multiple products and the dynamics of the market differ from sector to sector. Those uncertainties are compounded by inadequate reporting, the paucity of controlled deliveries and other undercover operations that are critical to the process of knowledge discovery in illegal markets and the over-reliance on anecdotal or specific cases without adequate consideration of their wider applicability, broader relevance or adequacy as a typical sample. The fact that the size of the illegal trade in endangered species cannot be precisely established does not, however, mean that the market is insignificant: it is a large and vibrant market with considerable demand and sufficient profit to attract both organized and other crime.²⁴

2. Seizures

While not flawless, the most reliable statistics are those of annual seizures made by national authorities. Seizures are reliant on two factors:

²² Broad, Mulliken and Roe (n 3) 6.

²³ Ibid.

²⁴ UN ECOSOC, Commission on Crime Prevention and Criminal Justice (n 9) 9 [27].

[1] The presence of contraband in the jurisdiction of the seizing authority; and [2] the proactive effort to detect and interdict that contraband. Thus, the quantity of seizures indicates both the presence of a problem and the initiative of the relevant authorities in addressing it. High levels of seizures are not necessarily an indicator of gaps and weaknesses of domestic systems; they are often precisely the opposite.²⁵

Consequently, States that dedicate the most effort to fighting trafficking may have higher seizure totals than similarly situated counterparts. For this reason, jurisdictions with the highest seizures are often transit countries and not the source nor the destination. UNODC's 2016 *World Wildlife Crime Report* notes:

[T]o avoid detection, traffickers favour those countries with limited interdiction capacity. Even countries with a good law enforcement capacity do not inspect their exports the way that they inspect their imports, so contraband sourced in countries with weak capacities is highly unlikely to be seized at the point of origin. Furthermore, corruption is essential to many contraband flows, and seizures are not made where the relevant officials are complicit.²⁶

Each seizure incident can provide multiple pieces of information on the nature of an illicit market. Whether transported by sea freight, air freight, personal courier, or mail, it is sometimes possible to determine where the contraband originated, transited, and was destined. [...] In addition, a seizure allows a great deal of information to be obtained about the identity and methods of the traffickers, when the confiscating authorities take the initiative to record these details. Aside from routes, the preferred methods of conveyance and concealment can be documented. [In some cases, t]he age, gender, and nationalities of those associated with the shipment can be recorded, as well as the laws used to charge them.²⁷

Several databases have been established to record information relating to seizures and to facilitate the study of wildlife trafficking patterns. UNODC maintains a global database of seizure incidents called World WISE, the World Wildlife Seizure database. The World Customs Organisation (WCO) gathers some wildlife seizure data through its CEN database. WCO-CEN data are also a large component of the seizure database of the European Commission Enforcement Working Group, known as EU-TWIX (European Union Trade in Wildlife Information Exchange).²⁸ In the United States, the US Fish and Wildlife Service (USFWS) records details of seizures in the

²⁵ UNODC, *World Wildlife Crime Report: Trafficking in protected species* (2016) 28.

²⁶ Ibid.

²⁷ Ibid.

²⁸ Ibid.

Law Enforcement Management Information System (LEMIS).²⁹ Furthermore, States Parties to *CITES*, the *Convention on International Trade in Endangered Species*,³⁰ are required to submit annual reports of international trade, including seizures of listed species, which are made available on the United Nations Environment Program World Conservation Monitoring Centre (UNEP-WCMC) CITES trade database.³¹

3. Dark figures

One of the difficulties in collecting statistics is the fact that in the context of wildlife trafficking, complainants will only contact the authorities to report a crime in rare and exceptional circumstances, usually when they experience personal loss or harm. Even where they exist, crime statistics alone do not necessarily provide a good indication of the prevalence of crime and victimisation in a given country because they are greatly influenced by the willingness of victims to report the crime to the police. The reporting rate, as it is usually referred to, may be affected by a number of factors such as access to law enforcement agencies and confidence in the police. Victims and witnesses of crime are unlikely to report it to the authorities when they do not have much trust in them or cannot reasonably expect much help from them.³² Crime statistics therefore provide a flawed estimate of the level of wildlife trafficking.

The difference between how much crime actually occurs and how much crime is reported to or discovered by the authorities is referred to as the 'dark figure'. Further compounding the problem of reporting and documenting wildlife crime is that the victims—in this case, wildlife—cannot report crime to the police. This 'silent victim' problem only adds to the difficulty of measuring this crime type.

29 See further Gohar A Petrossian et al, 'An overview of seized illegal wildlife entering the United States' (2016) 17(2) *Global Crime* 181–201.

30 *Convention on International Trade in Endangered Species of Wild Flora and Fauna*, opened for signature 3 March 1973, 993 UNTS 243 (entered into force 1 July 1975).

31 Neil d'Cruze and David W Macdonald, 'A review of global trends in CITES live wildlife confiscations' (2016) 15 *Nature Conservation* 47, 49–48.

32 UNODC, *Criminal Justice Assessment Toolkit* (2006) Criminal Justice Information, 1.

IV. Demand and supply

1. Consumption and demand

The widespread demand for fauna and flora for commercial or personal use is the main driver for wildlife trafficking. Wildlife trafficking often involves luxury goods such that consumption is driven by choice rather than necessity. Some consumers prefer to buy wild-sourced products even if captive-bred or plantation alternatives are readily available, because material sourced from the wild is often seen as authentic, superior, and, depending on the type of use, more efficient.

1.1. Medicinal use and healthcare

The use of animal parts, plants, or compounds extracted from them for medicinal or remedial purposes is often linked to wildlife trafficking. Medicinal and remedial use of fauna and flora dates back centuries and remains popular today, with about 80 percent of the world population relying on it for primary healthcare.³³ Trafficked flora and fauna feature in products used as pharmaceuticals to treat specific illnesses and ailments or as tonics and supplements.

Animals and animal parts used for medicinal purposes range from leeches (used to increase blood circulation and break up blood clots) to the gall bladders of pythons (the bile of which is used to treat ailments such as whooping cough, rheumatic pain, high fever, infantile convulsion, hemiplegia, haemorrhoids, gum bleeding, and skin infections).³⁴ The horn of rhinoceros is traditionally used in Asia to reduce fevers, rheumatism, gout, and infections. More recently, the use of rhino horn to treat ailments such as hangovers to cancer and to enhance sexual performance has led to rising demand.³⁵ Tiger bone is used to treat rheumatism and a variety

33 Broad, Mulliken and Roe (n 3) 3.

34 Ibid 6.

35 Julie Ayling, *A regulatory approach to demand reduction in the illegal wildlife market*, RegNet Research Papers No 82 (2015) 5; Andrea Crosta, Kimberley Sutherland and Chiara Talerica, *Grinding Rhino: An Undercover Investigation on Rhino Horn Trafficking in China and Vietnam* (2017) 16, 18.

of other ailments of the muscles and bones and is also marketed as both a tonic and a virility product.³⁶ Consumption of such products is often based on the belief that they can confer some qualities of the animal or plant from which they come.³⁷

1.2. Food consumption

Many people around the world rely on wild-sourced animals and plants for food. This covers many species ranging from primates to insects, wild herbivores and cats, and reptiles, such as snakes, crocodiles and tortoises. Because of their presumed healing effect, the same animal species used in the production of medicine, tonics, and supplements are also often consumed for food.³⁸ For some people, wild-sourced animals form part of a staple diet, particularly where alternative sources of protein are unaffordable or unavailable. For example, poaching has halved the Republic of Congo's gorilla population in the last 20 years for this reason.³⁹

In other markets, wild-sourced animals are consumed as luxury items or feature as novelty foods on restaurant menus.⁴⁰ The use of tiger meat, for instance, is less common today, but reports of tiger meat in the restaurant trade in East and Southeast Asia surface occasionally. The primary reason for consumption appears to be prestige, with full knowledge of both the illegality of and conservation impact.⁴¹ Food consumption is also a main driver for the use of illegal fishing methods, fishing in protected areas, and over-fishing.⁴²

36 Steven Broad and Richard Damania, *Competing demands: Understanding and addressing the socio-economic forces that work for and against tiger conservation*, Global Tiger Initiative Thematic & Working Paper Series (April 2010) 6.

37 UNODC (n 25) 65.

38 Ibid.

39 Sarah Gluszek et al, *Urban Bushmeat Trade in Kinshasa and Brazzaville*, report prepared for the Wildlife Conservation Society (April 2018) 13 – 15.

40 UNODC (n 25) 65 – 66; Clive C J Phillips, *The Animal Trade* (2015) 143.

41 Broad and Damania (n 36) 7.

42 Teale N Phelps Bondaroff et al, *The Illegal Fishing and Organized Crime Nexus: Illegal Fishing as Transnational Organized Crime* (2015) 17, 22.

1.3. Curios and collections

Exotic animals, animal parts, and plants are frequently sold as collectables and curious. This involves whole animals that are stuffed or encased in plastic to put on display. Many animal parts such as ivory, turtle and mollusc shells, reptile skins, bird feathers, and coral are carved or otherwise altered for decorative purposes. For example, the distinctive head ‘casque’ of the helmeted hornbill, a bird found in Southeast Asia, is used for carvings in China where the casques are valued by the same consumers and markets as those involved in trading elephant ivory.⁴³ The skin of many Asian big cats, including tigers, leopards, and Asiatic lions are used to make throws, rugs, or other decorative pieces. Tourists frequently purchase souvenirs that are made from local wildlife and may thus, wittingly or unwittingly, acquire objects made from endangered species or from illegally sourced animals or plants.⁴⁴

1.4. Clothing and accessories

Animal products, including furs, feathers, and fibres, have been used to make or decorate clothing for centuries, and their use continues today in the fashion industry. This mostly involves mammal, reptile, bird, and fish products that are used in the production of coats, pants, footwear, bags, belts, purses, and other accessories.⁴⁵ While many companies have substituted wild-sourced material for captive-sourced or synthetic alternatives, some expensive, high fashion items continue to be produced from wild-sourced animals. This usually happens when captive breeding is not feasible or cost effective and/or if consumers willing to pay high prices specifically demand genuine, wild-sourced material.⁴⁶

43 EIA, *High profit/low risk: Reversing the wildlife crime equation*, A briefing for the Kasane Conference on Illegal Wildlife Trade (25 March 2015) 2.

44 Broad, Mulliken and Roe (n 3) 11; UNODC (n 25) 51.

45 Broad, Mulliken and Roe (n 3) 11.

46 Ibid.

1.5. Cosmetics and fragrance

Derivatives from wild animals and plants sometimes form the basis of cosmetics and fragrances. Musk, a greasy, glandular secretion from animals, and ambergris, a waxy substance produced in the digestive system of sperm whales, for instance, were once used for perfumes but have since been replaced by synthetic alternatives. Today, wild-sourced plants are still used in the cosmetics and fragrance industry. Increases in demand can lead to rapid overharvesting and when the species in question is slow to recover, as is the case with many tree species, the impact can be severe.⁴⁷ For example, the overharvesting of the *aquilaria* tree found in South and Southeast Asia is attributed to the exploitation of a product referred to as ‘oud’. The complex scent of this unusual resin has been used in fragrances and incense across a wide range of cultures and has also been ascribed medicinal and cosmetic benefits used in both Chinese and Ayurvedic therapies.⁴⁸

1.6. Construction and furniture

Plants and plant material are widely used in the furniture, building, and construction industries. This includes timber as well as rattan (made from climbing palms), bamboo, and plant products such as oils, gums, dyes, and latex.⁴⁹ Tropical hardwood is particularly valued even though it may involve endangered tree species or come from tropical rainforests or other areas that are protected and have fragile ecosystems. Illegal and excessive logging poses a challenge to many source countries especially those with large remote forest areas where logging activities are difficult to control, where forest-loss is difficult to monitor, and where it is difficult to stop illegal activities.⁵⁰

For example, the popularity of rosewood to make furniture and artwork has a long history in Asia. Much of the timber is supplied from Cambodia, Lao PDR, Myanmar, and Thailand, but also from African countries including

⁴⁷ UNODC (n 25) 60.

⁴⁸ Ibid.

⁴⁹ Broad, Mulliken and Roe (n 3) 11.

⁵⁰ UNODC (n 25) 33–34.

Guinea Bissau, Mozambique, and Madagascar. The supply can have devastating effects on the rainforests of these source countries. While the trade in several rosewood species is restricted under international law, illegal, logging and trade continue on a significant scale.⁵¹

1.7. Pets and zoos

Living animals are often trafficked to use them as pets or to add them to private collections or zoos. The international trade of living wild-sourced animals for use as pets is dominated by reptiles, birds, especially parrots, and ornamental fish.⁵² It also includes invertebrate species such as scorpions and spiders, albeit less commonly.⁵³ The trade of living animals for use in zoos tends to involve a lower number of larger animals, often selected precisely because they are have become rare in the wild.⁵⁴ Trafficking in living animals also extends to the collection, transportation, and sale of eggs.⁵⁵

One of the most commonly trafficked type of exotic pets are parrots. Wildlife trade is thought to contribute to the fact that nearly 30 percent of the 355 known species of parrots are currently threatened with extinction. The parrot species most commonly kept as pets include budgerigars, African grey parrots, macaws, and cockatoos. These birds are particularly valued for their vocalisations, cognitive abilities, and colourful appearance, and cockatoos for their erectile crest.⁵⁶

51 Ayling (n 35) 4.

52 UNODC (n 25) 75; CITES Secretariat, 'Tortoises and freshwater turtles (testudines spp.)' (Conference Paper, Meeting of the Conference of the Parties, 24 September–5 October 2016) CoP17 Doc. 73 7.

53 Broad, Mulliken and Roe (n 3) 11; UNODC (n 25) 74.

54 UNODC (n 25) 75.

55 Phillips (n 40) 144.

56 Ibid; José J Tella and Fernando Hiralod, 'Illegal and Legal Parrot Trade Shows a Long-Term, Cross-Cultural Preference for the Most Attractive Species Increasing Their Risk of Extinction' (2014) 9(9) *PLoS ONE* [s.p.].

1.8. Ornamental plants and gardens

Just as people purchase animals for use as pets, many plants are traded for use in gardens, parks, and private homes.⁵⁷ The ornamental orchid trade, for instance, involves thousands of species that are traded between vendors and buyers all over the world. Whereas some specialists may be more likely to seek out wild plants deliberately, it is also possible that casual growers may purchase wild plants, often without realising the implications. Although all international movement of orchid species is regulated by *CITES*, traffickers take advantage of the lack of monitoring of online sales, and social-media to advertise wild-collected plants.⁵⁸

2. The supply-demand cycle

The diverse demand for wild animals, animal parts and products, plants, and plant material is met by supply from areas where species that cannot be found in other place are endemic or where species exist that are extinct elsewhere. Trafficking in ivory and rhino horn from Africa, where most the elephants and rhinoceros are poached, to Asia, where most of the demand exists, illustrates the complexity of intercontinental trafficking particularly well. Trafficking in tiger parts, by contrast, mostly occurs between countries in Asia.⁵⁹

Traditionally, much of the literature has described the trafficking of wildlife and plants as a north-south flow, noting that developing nations in ‘the global south’ tend to be suppliers while the demand for wildlife, wildlife products, and plants stems from developed nations in ‘the global north’. Wildlife has been described as a significant resource of many developing countries in Africa, Asia, and Latin America where they play a major and often very critical role in people’s livelihoods.⁶⁰ On the supply side,

57 Patrick D Shirey and Gary A Lamberti, ‘Comment: Regulate trade in rare plants’ (2011) 469 *Nature* 465, 465; Broad, Mulliken and Roe (n 3) 11.

58 Amy Hinsley, *The role of online platforms in the illegal orchid trade from South East Asia* (September 2018) 4, 14.

59 See the illustrations in Nikkita G Patel et al, ‘Quantitative methods of identifying the key nodes in the illegal wildlife trade network’ (2015) 112(26) *Proceedings of the National Academy of Sciences of the United States* 7948, 7949.

60 Broad, Mulliken and Roe (n 3) 5.

widespread poverty can drive people to engage in or support behaviour that degrade the environment upon which they depend so much so that sustainable livelihoods cannot be maintained. On the demand side, wealth often fuels consumption patterns that undervalue and drive the over-exploitation and depletion of natural resources in source countries.⁶¹ Supply and demand thus seem to be caught in a cycle where demand fuels supply and supply creates demand, much to the detriment of the wildlife, environments, and people in some of the least developed countries.

A closer look at the supply and consumption patterns, and the characteristics of the wildlife trafficking, however, challenges this narrative. A 2018 study, for instance, shows that high volumes of wildlife products come from and are destined for developed nations. The study also found that some commodities are trafficked within and among developing nations. Furthermore, several emerging economies have among the highest consumption of illegal wildlife products.⁶²

The connections between source and destination countries and between supply and demand are complex and do not fit in simple dichotomies. The web that connects points of origin for wildlife to consumer countries is indicative of the multistage journeys that many of these goods take before reaching their intended destination.⁶³ Moreover, the dividing line between subsistence use of wildlife and commercial wildlife trafficking for profit is often blurred.⁶⁴

3. Impact on pricing

Statements about the value of wildlife trafficking vary greatly and are highly speculative. Many analyses support the view that the rarer and more endangered a species is, the higher its price on the illicit market. An increasingly scarce supply of many protected species, combined with strong demand, is said to cause prices of wildlife, their parts, and derivatives to rise markedly, a phenomenon known as the ‘anthropogenic

⁶¹ Ibid 3.

⁶² William S Symes et al, ‘The gravity of the wildlife trade’ (2018) 218 *Biological Conservation* 268, 274.

⁶³ Ibid.

⁶⁴ Broad, Mulliken and Roe (n 3) 6.

allee effect'.⁶⁵ This creates a significant financial incentives to become involved in illicit wildlife markets.⁶⁶

Consumers may prefer rare species and pay disproportionately high prices for them, leading to increased poaching. The more endangered a species becomes, the greater is the commercial value that is put on the remaining specimens, thereby increasing the price and the incentive for trafficking.⁶⁷ This results in a positive feedback loop: paying disproportionately high prices for rare species makes it worthwhile for poachers to dedicate more time and effort to find the animal and for traffickers to go to great length to conceal their contraband, which in turn makes the species rarer and more expensive.⁶⁸ For these reasons, the listing and classification of species according to their level of vulnerability to extinction (ie vulnerable, endangered, or critically endangered) in the *CITES* appendices or other 'red lists' has been criticised by some experts because it may promote, rather than curb, wildlife trafficking by inadvertently advertising their rarity.⁶⁹ The provisions and operation of *CITES*, especially in the context of wildlife trafficking, are further discussed in Chapter Six of this volume.

A 2016 publication stresses that '[s]upply-side economists point out that the cost of items traded on the illicit wildlife market are extremely high and that, despite the fact that international trade in those items is illegal, demand appears insatiable.'⁷⁰ To reduce the scale and value of the illicit market, some sources argue that the illicit wildlife market should be legalised; supply can then be increased and prices will go down. Once the price

65 See further Franck Courchamp et al, 'Rarity Value and Species Extinction: The Anthropogenic Allee Effect' (2006) 4 (12) *PlosOne* [s.p.]; M H Holden and E McDonald-Madden, 'High prices for rare species can drive large populations extinct: the anthropogenic Allee effect revisited' (2017) *Journal of Theoretical Biology* 170–180.

66 Anita Sundari and Crawford Allan, *Dismantling Wildlife Crime*, Executive Summary (November 2012) 2.

67 UN ECOSOC, Commission on Crime Prevention and Criminal Justice (n 9) 9 [26].

68 Yik-Hei Sung and Jonathan Fong, 'Assessing consumer trends and illegal activity by monitoring the online wildlife trade' (2018) 227 *Biological Conservation* 227, 228.

69 Alacs and Georges (n 14) 153–154.

70 Annecoos Wiersema, 'Incomplete Bans and Uncertain Markets in Wildlife Trade' (2016) 12 *University of Pennsylvania Asian Law Review* 65, 78.

goes down, the incentives for poachers will be removed and poachers and those involved in wildlife trafficking will move out of the market.⁷¹

Others are sceptical about the supply-side model, noting that wildlife trafficking does not take place in a perfectly competitive market. They argue that markets for endangered species are more appropriately considered to be run as oligopolies where small numbers of large traders compete. In these markets, it is not clear that creating a legal supply will result in traders leaving the market. Instead, traders may increase their activity to try to compensate for the lower per-unit profit made for each specimen due to the newly flooded market,⁷² which in turn will place even greater strain on species already threatened by extinction.

V. Perpetrators and their networks

1. Typology of offenders

Wildlife trafficking involves a range of actors involved in poaching, trapping, harvesting, supplying, trading, selling, possessing, and consuming wild animals, animal products, and plants. These actors differ not only in the role they play along trafficking chain, but also in their socioeconomic background and motivations, in the scale and intensity of their operations, the levels of technology and investment, their source of funding, and their skill and knowledge, including that of relevant laws and regulations. Actors can occupy multiple roles in wildlife trafficking and some target their activities at specific species, while others operate more broadly.⁷³

A study published in 2016 separates the roles and activities involved in wildlife trafficking into three categories: harvesters, intermediaries, and consumers (Figure 1 below). These categories are not meant to be

71 Ibid; Erwin H Bulte and Richard Damania, 'An Economic Assessment of Wildlife Farming and Conservation' (2005) 19 *Conservation Biology* 1222, 1227.

72 Wiersema (n 70) 79.

73 Jacob Phelps et al, 'Tools and terms for understanding illegal wildlife trade' (2016) 14(9) *Frontiers in Ecology and the Environment* 479, 480; see also the findings of Greg Warchol, 'The Transnational Illegal Wildlife Trade' (2004) 17(1) *Criminal Justice Studies* 57, 40.

exhaustive or mutually exclusive; they are intended to capture and illustrate the wide spectrum of actors involved in wildlife trafficking.

Figure 1: Typology of key actor roles along illegal wildlife trade market chains⁷⁴

Harvesters	Subsistence	Non-commercial harvest for household or local use (eg food, cultural,), usually comparatively small scale
	Specialist commercial	Harvest with an explicit commercial orientation that often involves specialist skills or technologies. Includes different harvest intensities and levels of technological investment, and is led by both self-employed and hired harvesters, as well as by local residents and non-residents
	Opportunist	Harvest based on chance encounters and circumstances, but not as a primary objective or livelihood strategy
	Local guide	Local residents hired to guide non-resident harvesters
	Rule abuser	Knowing abuse of harvest rules, such as quotas (eg under or mis-reporting), boundaries (eg protected area), or restrictions on technology (eg certain traps, nets)
	Bycatch	Unintentional harvest of non-target species
	Recreational	Harvest for enjoyment
	Reactionary	Harvest associated with discontent or protest (eg in reaction to conservation policies or conflict with wildlife)
Intermediaries	Logistician	Involved in ordering, aggregation, and transport, as well as financing and planning trade. May be directly involved in handling trade or involved at a distance.
	Specialist smuggler	Transport that requires specialized actions to evade detection or negotiate access, usually across borders (eg transboundary smuggling, specialist networks)
	Government colluder	Involved in using an official government position (eg park ranger, police officer, judge, prosecutor) to facilitate trade, whether for financial (corruption), social, or personal gain
	Third party	External services hired to support trade, but potentially unknowingly (eg bus or air transport)
	Processor	Involved in product transformation (eg skinning, medicine preparation)
	Launderer	Involved in laundering illegal wildlife into legal markets chains (eg via captive breeding or processing operations)
	Vendor	Involved in direct sale to consumers or to other intermediaries (eg market, online platform)

⁷⁴ Phelps et al (n 73) 481.

Consumers	Medicinal	Use associated with medicinal practices, usually traditional but some novel
	Ornamental	Use associated with ornaments and pets (eg ivory, shell, live parrots, aquarium fish)
	Cultural	Use associated with long-standing traditional practices (eg feathers, pelts, ritual harvest)
	Gift	Use as a gift, often to gain/demonstrate social standing or show respect
	Investment	Use as an investment, usually of high-value taxa
	Recreational	Use associated with the act of recreational harvest (eg game hunting, sport fishing)
	Animal food	Use as food for other animals (eg fodder, bait, small animals)
	Construction materials	Use for construction materials (eg timber, rattan)
	Fuel	Use for burning for heat or cooking
	Food	Use for direct consumption, ranging from luxury consumption to basic nutritional need

2. Organised criminal groups

The range and number of individuals involved in wildlife trafficking depends on several factors, including the expected end market and consumers, the characteristics of the trafficked item, and the capabilities and limitations of actors already involved in the trade.⁷⁵ Many activities require little skill and planning, especially if source and destination, supplier and consumer are in close proximity.

After the initial acts of poaching or collecting, subsequent stages often involve more organisation and the involvement of middlemen.⁷⁶ If intermediaries are required to transfer goods, if sophisticated methods are needed to conceal or disguise contraband, and if international borders need to be crossed, it may become necessary for perpetrators to partner

⁷⁵ Stephen F Pires and William D Moreto, *The Illegal Wildlife Trade*, Oxford Handbooks Online (2016) 12.

⁷⁶ Stephen F Pires and William D Moreto, 'Preventing Wildlife Crimes: Solutions That Can Overcome the "Tragedy of the Commons"' (2011) 17 *European Journal of Criminology and Policy Research* 101, 104.

with other individuals and entities.⁷⁷ In such circumstances, organised crime networks may emerge in which multiple offenders collaborate and sometimes set up complex schemes to acquire, move, and sell goods illegally, to hide their activities, and to launder the proceeds of their crimes.⁷⁸

Wildlife trafficking is a crime that can be highly organised, but myths about hierarchical, mafia-style criminal syndicates involved in every stage of wildlife trafficking are often not supported by evidence. The perception that wildlife trafficking is driven by organised crime ‘is fueled by the high profits associated with specific wildlife products (eg, ivory, rhino horn) and the ability to utilise established criminal networks and personnel, smuggling routes, and resources to entice corrupt officials.’⁷⁹ While some studies point to activities of organised criminal groups in particular stages or for specific species, others have found little or no evidence for organised crime involvement in wildlife trafficking.⁸⁰ In some instances, established organised criminal groups have become involved in wildlife trafficking to diversify their income.⁸¹

A study published in 2016 identified seven common structures in which perpetrators involved in wildlife trafficking associate. These structures, range from simple relationships, such as the subsistence and local use relationship, or a structure that links harvesters directly to consumers, to configurations that involve multiple intermediaries.⁸² The study further found that more complex structures are likely to arise if access to the market is restricted, whether to the resource itself, to transport routes, or to consumers, including to distant urban or international markets willing to pay higher prices.⁸³ Several other reports set out various indicators, such as organised structure, sophisticated financing, the use of corruption,

77 Kristof Titeca, ‘Illegal Ivory as Transnational Organized Crime? An Empirical Study into Ivory Traders in Uganda’ (2019) 59 *British Journal of Criminology* 24, 28–29.

78 Pires and Moreto (n 75) 15.

79 Ibid.

80 Ibid.

81 European Parliament, Directorate-General for Internal Policies, *Wildlife Crime* (March 2016) 67; Daan van Uhm, ‘Illegal Wildlife Trade to the EU and Harms to the World’, in Toine Spapens et al, *Environmental Crime in Transnational Context: Global Issues in Green Enforcement and Criminology* (2016) 43, 56.

82 Phelps et al (n 73) 483.

83 Ibid.

fraudulent documents, and violence, that, when present, may demonstrate the probability that organised crime is involved.⁸⁴

3. Corporate sector

In source countries, instances of corporations involved in illegal activities associated with wildlife trafficking often involve logging companies and fishing vessels. Logging companies may, for instance, operate without logging permits or illegally encroach on protected areas, harvest protected species, exceed their logging quotas, or bribe officials to unduly issue logging concessions.⁸⁵ Similarly, fishing companies or individual fishing vessels may venture unlawfully into protected areas, catch protected species, exceed set quotas, or using prohibited fishing methods.

Corporate sector involvement may occur at the transit stage if transportation companies carry, import, export, or launder contraband, forge documents, or fail to comply with documentation, certification, and reporting requirements. It may also involve collusion by airline staff and crews of cargo or cruise ships. At the destination, corporations may play a vital part in wildlife trafficking if they deliberately or negligently source or supply timber, plants, live animals or animal products that come from protected areas, involve protected species, et cetera.⁸⁶

4. Corruption and government involvement

Fauna and flora are high value natural resources. If these are placed under government control or regulation, they offer a potential source of power

84 UN ECOSOC, Commission on Crime Prevention and Criminal Justice (n 9) 10 [29]; EIA, *In Cold Blood: Combating organised wildlife crime* (2014) 4.

85 See, for example, Tim Boekhut van Solinge, 'Organized Forest Crime: A Criminological Analysis with Suggestion from Timber', in Daniela Kleinschmitt et al (eds), *Illegal Logging and Related Timber Trade – Dimensions, Drivers, Impact and Responses*, IUFRO World Series vol 35 (2016) 81, 84, 91.

86 See further, Daan van Uhm, 'Wildlife and Laundering: Interaction between the under and upper world', in Toine Spapens et al (eds), *Green Crime and Dirty Money* (2018) 197, 198 – 199.

and a correspondingly high risk of abuse of that power.⁸⁷ As a consequence, corruption in the allocation of hunting and logging concessions and in the issuing of permits to process, import and/or export fauna and flora is not uncommon. Corruption operates either to allow wildlife trafficking to occur in the first place, or to proceed unchecked or unbalanced.⁸⁸

Corruption can involve low-ranking game wards and forest officials who accept bribes and then ‘turn a blind eye’ to illegal activities.⁸⁹ It can also reach the top levels of government that are involved in policy decisions and law-making in the wildlife, forestry, and fisheries sectors. High-level or ‘grand’ corruption is the most damaging one as it causes significant financial losses and also encourages petty corruption at the lower levels of government.⁹⁰ In some cases, corruption is an intrinsic part of the patronage systems that sustain the power of a country’s ruling elite.⁹¹ Political manipulation often facilitates persistent illegal activities in the wildlife and forestry sectors. This can lead to a breakdown of law and order and hamper investment in these sectors.⁹²

In the context of wildlife trafficking, there are numerous ways in which bribes can be offered and paid, not only to government officials, but also to commercial enterprises and individuals who exercise control over certain areas, industries, materials, et cetera.⁹³ The topic of corruption in the context of wildlife trafficking is further discussed in Chapter Three of this volume.

While most, if not all countries, have laws that criminalise corruption and bribery, these offences frequently do not constitute an adequate deterrent because they are rarely enforced, because prosecutions rarely succeed, or

87 Cf FAO and ITTO, *Best Practices for Improving Law Compliance in the Forestry Sector* (2005) 11.

88 Debra J Callister, *Corrupt and Illegal Activities in the Forest Sector* (1999) 8.

89 See further Nalin Kishor and Richard Damania, ‘Crime and Justice in the Garden of Eden: Improving Governance and Reducing Corruption in the Forestry Sector’, in J Edgardo Campos & Sanjay Pradhan (eds), *The Many Faces of Corruption* (2007) 89, 98–99.

90 See further Debra J Callister, *Corrupt and Illegal Activities in the Forest Sector: Current understandings, and implications for the World Bank Forest Policy*, Draft for Discussion (May 1999) 9–10; Kishor and Damania (n 89) 95–97.

91 FAO and ITTO (n 87) 12.

92 UNODC (n 25) 54.

93 FAO and ITTO (n 87) 11; Kishor and Damania (n 89) 95–97.

because penalties are low. Elsewhere, domestic offences do not capture the bribery of foreign officials. As long as the risk of being caught and sanctioned is low, those working in official or private capacities in the wildlife, forestry, and fisheries sectors have little to lose from corruption. The challenges associated with criminalising wildlife trafficking and with enforcing relevant offences are further discussed in Chapter Nine of this volume.

VI. Locations and activities relating to wildlife trafficking

1. Concentrations of wildlife trafficking

Like other crimes, wildlife trafficking is concentrated around places, time, routes, and products. Case studies on different species point to underlying opportunistic factors for why wildlife trafficking is concentrated in various ways.

Not every wildlife species is equally in demand, or even accessible, and for this reason poaching is unevenly distributed among species. So-called ‘hot product’ analysis examines whether certain species are poached and/or trafficked more often than others. For example, wildlife seizures made at entry points in Asia, the European Union, and the United States show that certain taxonomic groups of wildlife are disproportionately trafficked into major demand markets while others are rarely seized.⁹⁴

The ‘CRAVED model’ (concealable, removable, available, valuable, enjoyable, and disposable) has been used to explain why certain products, such as parrots,⁹⁵ fish and crustaceans,⁹⁶ are more frequently taken from the wild

94 See, for example, Justin Kurland and Stephen F Pires, ‘Assessing U.S. Wildlife Trafficking Patterns: How Criminology and Conservation Science Can Guide Strategies to Reduce the Illegal Wildlife Trade’ (2017) 38(4) *Deviant Behaviour* 375 – 391.

95 Stephen F Pires and Ronald V Clarke, ‘Are Parrots CRAVED? An Analysis of Parrot Poaching in Mexico’ (2012) 49(1) *Journal of Research in Crime and Delinquency* 122 – 146.

96 Gohar A Petrossian and Robald V Clarke, ‘Explaining and Controlling Illegal Commercial Fishing: An Application of the CRAVED Theft Model’ (2014) 57 *British Journal of Crimi-*

and subsequently trafficked. This line of research has found that a mix of opportunity- and demand-side variables explain why certain species are at higher risk of being taken illegally. For example, parrot species that are the most abundant and accessible are the most frequently poached in Peru and Bolivia.⁹⁷

Several studies have found spatio-temporal concentrations of poaching. DNA assessments of seized ivory, for instance, has revealed that poaching of elephants is geographically concentrated in several hotspots in Africa.⁹⁸ Corroborating these findings, other studies reveal that elephant poaching has been found to be particularly problematic in only a few countries over a 20-year period.⁹⁹ At the local level, 'hot spots' for elephant poaching have been found within a Kenyan national park and such incidents were concentrated during the dry season. Within this same park, elephant poaching was significantly related to where higher elephant densities, water, and roads were found.¹⁰⁰ Other research on poaching of deer, rhinoceros, American ginseng, and redwood burl similarly reveal spatial concentrations and a link to accessibility (ie roads) and availability of targets.¹⁰¹

Several studies show that crime is often concentrated among 'hot routes'¹⁰² and 'risky facilities'.¹⁰³ This type of research suggests that 'hot routes' are

nology 73 – 90; Gohar A Petrossian et al, 'Factors affecting crab and lobster species subject to IUU Fishing' (2015) 106 *Ocean & Coastal Management* 29 – 34.

- 97 Stephen F Pires and Gohar A Petrossian, 'Understanding parrot trafficking between illicit markets in Bolivia: an application of the CRAVED model' (2016) 40(1) *International Journal of Comparative and Applied Criminal Justice* 63 – 77; Stephen F Pires, 'The Heterogeneity of Illicit Parrot Markets: An Analysis of Seven Neo-Tropical Open-Air Markets' (2015) 21 *European Journal on Criminal Policy and Research* 151 – 166.
- 98 S K Wasser et al, 'Genetic assignment of large seizures of elephant ivory reveals Africa's major poaching hotspots' (2015) 349(6423) *Science* 84 – 88.
- 99 Andrew M Lemieux and Ronald V Clarke, 'The International Ban on Ivory Sales and its Effects on Elephant Poaching in Africa' (2009) *British Journal of Criminology* 451 – 471.
- 100 John K Maingi et al, 'Spatiotemporal patterns of elephant poaching in south-eastern Kenya' (2012) 39(3) *Wildlife Research* 234 – 249.
- 101 Justin Kurland et al, 'Wildlife crime: a conceptual integration, literature review, and methodical critique' (2017) 6(4) *Crime Science* 1 – 15.
- 102 Lisa Thompson et al, 'Hot Routes: Developing a New Technique for the Spatial Analysis of Crime' (2009) 1(1) *Crime Mapping: A Journal of Research and Practice* 77 – 96.
- 103 John E Eck et al, 'Risky Facilities: Crime Concentration in Homogenous Sets of Establishments and Facilities' (2007) 21 *Crime Prevention Studies* 225 – 264.

being used from particular countries to particular ports. Using information retrieved from the USFWS LEMIS database, a study published in 2017, for instance, found that only a small number of export countries account for the majority of wildlife seizures entering the United States and that a small number of entry points seize a disproportionate amount of wildlife contraband.¹⁰⁴ ‘Risky facilities’ research has shown, for example, that fishing ports that were visited more often by problematic fishing vessels (ie vessels involved in illegal, unreported or unregulated fishing) were those ports that were larger, experienced more vessel traffic, and located in countries experiencing higher levels of corruption and with less effective fishery inspections.¹⁰⁵

2. Collecting, poaching, harvesting

The initial step in wildlife trafficking is the collection, poaching, or harvesting of the animal or plant—be it alive or killed in order to be further processed into a product or derivative of some sort. Wildlife trafficking is different from the trafficking of other forms of contraband. In most criminal markets, the damage only accrues when the contraband reaches its final consumer. In contrast, the main harm caused by wildlife trafficking occurs when the contraband is sourced. Once wildlife has been illegally sourced, the damage has been done, regardless of what happens later in the market.¹⁰⁶

3. Smuggling

Following the initial collection, the animal, animal part or plant needs to be brought to the buyer. Depending on the products and use, it may first undergo processing, modification, or manufacturing to alter it for the intended use. The methods used to bring the contraband from source to destination depends on a myriad of factors including locations, distance, border controls and other inspections, documentation, but also on specific

¹⁰⁴ Justin Kurland and Stephen F Pires, ‘Assessing U.S. Wildlife Trafficking Patterns: How Criminology and Conservation Science Can Guide Strategies to Reduce the Illegal Wildlife Trade’ (2017) 38(4) *Deviant Behaviour* 375 – 391.

¹⁰⁵ Petrossian et al (n 96) 29 – 34.

¹⁰⁶ UNODC, *Wildlife Crime Status Update 2017*, Research Brief (2017) 15.

requirements of the transported goods (whether they are fragile or solid, small or large, living or inanimate). Further impacting on the methods, means, and routes chosen are the legal frameworks relating to the protection of endangered species, animal welfare, customs et cetera, and the level of their enforcement.

Smuggling may involve hiding the wildlife contraband, forging permits, misusing real permits, or bribing customs and border officials. For some wildlife species, parallel markets and legal industries exist through which illegally obtained products may be laundered.¹⁰⁷

The relatively small size of most consignments seized means that traffickers use the services of various licit transport providers such as regular mail, commercial passenger and cargo airlines, shipping, trucking, container-leasing and warehousing companies. In most cases, these companies are unaware of the contraband they carry because it has not been disclosed to them or it has been declared falsely or fraudulently.¹⁰⁸ In some cases, however, carriers have been complicit in wildlife trafficking, as have been corrupt officials in customs, border control, and other inspection and loading points. Smuggling may also be carried out by ignorant tourists who purchase wildlife products and pets and take them home in their luggage or ship them by mail or courier.

3.1. Concealment of contraband

Much like any other high-value contraband, wildlife smugglers go to significant length to hide illicit products from law enforcement and customs inspections. The methods used to conceal illicit shipments of ivory, for instance, range from traffickers filling containers with pungent cover materials like fish maws or anchovies to disguise the smell of ivory from inspection dogs, to modifying containers themselves to create false backs and compartments to hide the ivory.¹⁰⁹

¹⁰⁷ EIA (n 43) 10–11.

¹⁰⁸ Jackson Miller, Varun Vira and Mary Utermohlen, *Species of Crime: Typologies & Risk Metrics for Wildlife Trafficking* (May 2015) 12.

¹⁰⁹ Ibid 13.

A seemingly endless range of methods are used to hide or disguise animals, animal parts, and plants, especially when contraband crosses international borders. Individual travellers sometimes hide living animals, animal products, plants, and plant material in their luggage. Ivory is sometimes painted to disguise it as wood or plastic. A smuggler based in West Africa, for instance, was found boiling ivory and soaking it in resin to stain it and make it appear more antiquated before exporting the contraband to the United States, thereby exploiting a *CITES* loophole that may permit trade in antique ivory. In 2013, customs authorities in Macau SAR intercepted two South African nationals attempting to smuggle 34 kilogrammes of ivory disguised as chocolate bars in their hand luggage. The ivory had been cut up into smaller pieces, individually wrapped in fake packaging, and covered in a brown substance to create the impression of chocolate bars.¹¹⁰

Some smugglers hide eggs, animals, or other contraband in their clothing, sometimes in specially designed compartments. In one instance, a man used a compartment in his prosthetic leg to smuggle three iguanas from Fiji to the United States.¹¹¹ In the case of falcons, sedated live birds may be wrapped in cloth and placed into tubes which are then carried in people's luggage or hidden in other products like fruit. It is not uncommon for wildlife to be smuggled on people themselves: rare bird eggs in pockets and snakes in trousers.¹¹²

In many locations, it is not necessary to conceal the contraband, especially if border controls are non-existent or ineffective. It has been reported, for instance, that in some countries, 'large quantities of wildlife are transported across borders by truck without any special effort at concealment'.¹¹³

3.2. Fraudulent documents

Once a part has been removed from an animal or the animal removed from its natural surroundings, it can become extremely difficult to establish or

¹¹⁰ Ibid 14.

¹¹¹ Rosen and Smith (n 2) 27.

¹¹² Miller et al (n 108) 14.

¹¹³ Rosen and Smith (n 2) 27.

distinguish the species, the location it has come from, or the method with which it has been obtained. If the species is the same, but one source (for example captive breeding) is legal, and another (poaching) is illegal, it can be difficult, if not impossible, to distinguish between the two sources. When it is hard or impossible to verify the source of a specimen, laundering becomes a significant problem.¹¹⁴ Customs officials and other law enforcement personnel are often not sufficiently expert to tell the difference between species (such as turtles), which makes it easy for false declarations and fraudulent documents to remain undetected. The role of customs in the context of wildlife trafficking is more broadly discussed in Chapter Thirteen of this volume.

3.3. Smuggling routes

Smuggling routes for trafficking in wildlife frequently do not follow direct lines between source and destination countries; they can be circuitous and involve multiple transit stages. Research published in 2018 also reveals that trafficking does not always conform with the traditional stereotype of smuggling wildlife, animal parts, or plants from developing to more developed countries.¹¹⁵ Complex smuggling routes sometimes serve to conceal the origin or destination of the shipment to take advantage of transit points with underdeveloped legal frameworks or poor law enforcement.

4. Selling

Trafficked wildlife, including living animals, animal products, and derivatives, as well as timber, plants, plant material and products, is offered for sale—overtly and covertly—in a wide variety of markets. The range of places where such contraband may be sold range from stores and physical markets to persons selling goods in the street, to advertisements for private or commercial sales, and to catalogues and restaurant menus. In some places, wildlife products, even if they come from an illicit source or

¹¹⁴ Wiersema (n 70) 81–82.

¹¹⁵ Symes et al (n 62) 274.

involve an endangered species, are on public display for sale. Elsewhere, they may only be shown if specifically asked for or after middlemen establish a connection between the seller and the buyer (to ensure illegal sales remain undetected by authorities). Depending on the commodity, it is also not uncommon for contraband to be co-mingled with licit products to disguise their origin. Some sellers specialise in offering wildlife contraband for sale; others sell them in addition to licit goods. Some only sell to trusted buyers to avoid detection and arrest; others sell to the general public, including buyers who are ignorant about the source of the product or the species they are purchasing.

The internet is an important platform for legal and illegal wildlife trade. It is a convenient medium for traffickers to advertise and sell anonymously and it enables direct sales to the buyer thereby eliminating the need for intermediaries. Despite increased awareness and vigilance by some online companies, the proliferation of illegal wildlife products on the Internet continues. Several reports also point to the use of social media and the 'dark web' for the sale of wildlife contraband.¹¹⁶

VII. Observations

This chapter sheds some light into the modalities and characteristics of wildlife trafficking. It quickly becomes evident, that wildlife trafficking is a complex, global phenomenon that defies single and simplistic solutions. It is difficult, and sometimes not possible, to make generalisations about what drives this illegal trade, how it operates, what motivates offenders, and about the measures best suited to prevent and combat wildlife trafficking.

Research on wildlife trafficking is only in its infancy and many causes and circumstances have yet to be thoroughly documented and explored. Much of the available literature focusses on some high profile species, such as elephants and rhinoceros, while trafficking in many other species, plants in particular, remains under-researched. The purpose of this chapter is

¹¹⁶ See, for example, Joseph R Harrison et al, 'Assessing the extent and nature of wildlife trade on the dark web' (2016) 30(4) *Conservation Biology* 900 – 904; IFAW, *Wanted – Dead or Alive: Exposing Online Wildlife Trade* (undated).

merely to canvass some of the main factors that explain and impact on wildlife trafficking and to contextualise and set the scene for other, more detailed studies that constitute the remaining parts of this book.

Bibliography

- Alacs, Erika and Arthur Georges, 'Wildlife across our borders: a review of the illegal trade in Australia' (2008) 40(2) *Australian Journal of Forensic Sciences* 147
- Ayling, Julie, *A regulatory approach to demand reduction in the illegal wildlife market*, RegNet Research Papers No 82, Canberra, ACT: Australian National University, School of Regulation and Global Governance (RegNet), 2015
- Baker, Sandra E, 'Rough Trade: Animal Welfare in the Global Wildlife Trade' (2013) 63(12) *BioScience* 928
- Boekhut van Solinge, Tim, 'Organized Forest Crime: A Criminological Analysis with Suggestion from Timber', in Daniela Kleinschmitt et al (eds), *Illegal Logging and Related Timber Trade – Dimensions, Drivers, Impact and Responses*, IUFRO World Series vol 35, Vienna: IUFRO, 2016, 81
- Broad, Steven and Richard Damania, *Competing demands: Understanding and addressing the socio-economic forces that work for and against tiger conservation*, Global Tiger Initiative Thematic & Working Paper Series, Washington, DC: Global Tiger Initiative, April 2010
- Broad, Steven, Teresa Mulliken and Dilys Roe, 'The Nature and Extent of Legal and Illegal Trade in Wildlife', in Sara Oldfield (ed), *Trade in Wildlife: Regulation for Conservation*, London: Routledge, 2012, 3
- Bulte, Erwin H and Richard Damania, 'An Economic Assessment of Wildlife Farming and Conservation' (2005) 19 *Conservation Biology* 1222
- Callister, Debra J, *Corrupt and Illegal Activities in the Forest Sector: Current understandings, and implications for the World Bank Forest Policy*, Draft for Discussion, Washington, DC: The World Bank, May 1999 <<http://intra.tesaf.unipd.it/pettenella/certificazione/convegno%206%20marzo/download/Corruption%20in%20forestry.pdf>>
- CITES Secretariat, 'Tortoises and freshwater turtles (testudines spp.)' (Conference Paper, Meeting of the Conference of the Parties, 24 September–5 October 2016) CoP17 Doc. 73 7

- Courchamp, Franck et al, 'Rarity Value and Species Extinction: The Anthropogenic Allee Effect' (2006) 4(12) *PlosOne* [s.p.]
- Crosta, Andrea, Kimberley Sutherland and Chiara Talerica, *Grinding Rhino: An Undercover Investigation on Rhino Horn Trafficking in China and Vietnam*, Los Angeles, CA: Elephant Action League, 2017
- D'Agrosa, Caterina et al, 'Vaquita Bycatch in Mexico's Artisanal Gillnet Fisheries: Driving a Small Population to Extinction' (2000) 14(4) *Conservation Biology* 1110
- D'Cruze, Neil and David W Macdonald, 'A review of global trends in CITES live wildlife confiscations' (2016) 15 *Nature Conservation* 47
- Dee, Laura E, 'Conservation and management of ornamental coral reef wildlife' (2014) 169 *Biological Conservation* 225
- Eck, John E et al, 'Risky Facilities: Crime Concentration in Homogenous Sets of Establishments and Facilities' (2007) 21 *Crime Prevention Studies* 225
- EIA, *High profit/low risk: Reversing the wildlife crime equation*, A briefing for the Kasane Conference on Illegal Wildlife Trade, London: EIA, 25 March 2015
- EIA, *In Cold Blood: Combating organised wildlife crime*, London: EIA, 2014
- European Parliament, Directorate-General for Internal Policies, *Wildlife Crime*, Study for the ENVI Committee, Brussels: European Union, March 2016
- FAO and ITTO, *Best Practices for Improving Law Compliance in the Forestry Sector*, Rome: FAO, 2005
- Ferretti, Francesco et al, 'Patterns and ecosystem consequences of shark declines in the ocean' (2010) 13(8) *Ecology Letters* 1055
- Gluszek, Sarah et al, *Urban Bushmeat Trade in Kinshasa and Brazzaville*, report prepared for the Wildlife Conservation Society, April 2018
- Harrison, Joseph R et al, 'Assessing the extent and nature of wildlife trade on the dark web' (2016) 30(4) *Conservation Biology* 900
- Hinsley, Amy, *The role of online platforms in the illegal orchid trade from South East Asia*, Geneva: The Global Initiative Against Transnational Organized Crime, September 2018
- Holden, M H and E McDonald-Madden, 'High prices for rare species can drive large populations extinct: the anthropogenic Allee effect revisited' (2017) *Journal of Theoretical Biology* 170
- IFAW, *Wanted – Dead or Alive: Exposing Online Wildlife Trade*, London: IFAW, undated

- Jaramillo-Legoretta, Armando et al, 'Saving the Vaquita: Immediate Action, Not More Data' (2007) 21(6) *Conservation Biology* 1653
- Kurland, Justin and Stephen F Pires, 'Assessing U.S. Wildlife Trafficking Patterns: How Criminology and Conservation Science Can Guide Strategies to Reduce the Illegal Wildlife Trade' (2017) 38(4) *Deviant Behaviour* 375
- Kurland, Justin et al, 'Wildlife crime: a conceptual integration, literature review, and methodical critique' (2017) 6(4) *Crime Science* 1
- Lemieux, Andrew M and Ronald V Clarke, 'The International Ban on Ivory Sales and its Effects on Elephant Poaching in Africa' (2009) *British Journal of Criminology* 451
- Maingi, John K et al, 'Spatiotemporal patterns of elephant poaching in south-eastern Kenya' (2012) 39(3) *Wildlife Research* 234
- McClellan, Kate, 'Coral degradation through destructive fishing practices', *The Encyclopedia of Earth* (Web page, 24 August 2008) <https://editors.eol.org/eoearth/wiki/Coral_degradation_through_destructive_fishing_practices>
- Miller, Jackson, Varun Vira and Mary Utermohlen, *Species of Crime: Typologies & Risk Metrics for Wildlife Trafficking*, Washington, DC: C4Ads, May 2015
- Moreto, William D and Stephen F Pires, *Wildlife Crime: An Environmental Criminology and Crime Science Perspective*, Durham, NC: Carolina Academic Press, 2018
- Nellemann, Christian et al, *The Last Stand of the Gorilla: Environmental Crime and Conflict in the Congo Basin* Arendal: UNEP and GRID-Arendal, 2010
- Patel, Nikkita G et al, 'Quantitative methods of identifying the key nodes in the illegal wildlife trade network' (2015) 112(26) *Proceedings of the National Academy of Sciences of the United States* 7948
- Petrossian Gohar A et al, 'Factors affecting crab and lobster species subject to IUU Fishing' (2015) 106 *Ocean & Coastal Management* 29
- Petrossian, Gohar A and Ronald V Clarke, 'Explaining and Controlling Illegal Commercial Fishing: An Application of the CRAVED Theft Model' (2014) 57 *British Journal of Criminology* 73
- Petrossian, Gohar A et al, 'An overview of seized illegal wildlife entering the United States' (2016) 17(2) *Global Crime* 181
- Phelps Bondaroff, Teale N, *The Illegal Fishing and Organized Crime Nexus: Illegal Fishing as Transnational Organized Crime*, Geneva: The Global Initiative Against Transnational Organized Crime and The Black Fish 2015

- Phelps, Jacob et al, 'Tools and terms for understanding illegal wildlife trade' (2016) 14(9) *Frontiers in Ecology and the Environment* 479
- Phillips, Clive C J, *The Animal Trade*, CABI, 2015
- Pires, Stephen F and Gohar A Petrossian, 'Understanding parrot trafficking between illicit markets in Bolivia: an application of the CRAVED model' (2016) 40(1) *International Journal of Comparative and Applied Criminal Justice* 63
- Pires, Stephen F and Ronald V Clarke, 'Are Parrots CRAVED? An Analysis of Parrot Poaching in Mexico' (2012) 49(1) *Journal of Research in Crime and Delinquency* 122
- Pires, Stephen F and William D Moreto, 'Preventing Wildlife Crimes: Solutions That Can Overcome the "Tragedy of the Commons"' (2011) 17 *European Journal of Criminology and Policy Research* 101
- Pires, Stephen F and William D Moreto, *The Illegal Wildlife Trade*, Oxford Handbooks Online, Oxford: Oxford University Press, 2016
- Pires, Stephen F, 'The Heterogeneity of Illicit Parrot Markets: An Analysis of Seven Neo-Tropical Open-Air Markets' (2015) 21 *European Journal on Criminal Policy and Research* 151
- Rosen, Gail E and Katherine F Smith, 'Summarizing the evidence on the international trade in illegal wildlife' (2010) 7 *EcoHealth* 24
- Saragusty, Joseph et al, 'Skewed birth sex ratio and premature mortality in elephants' (2009) 115(1) *Animal Reproduction Science* 247
- Shirey, Patrick D and Gary A Lamberti, 'Comment: Regulate trade in rare plants' (2011) 469 *Nature* 465
- South Nigel and Avi Brisman, 'Critical Green Criminology, Environmental Rights and Crimes of Exploitation', in Simon Winlow and Roland Atkinson (eds), *New Directions in Crime and Deviance*, London: Routledge, 2013, 99
- Sundari, Anita and Crawford Allan, *Dismantling Wildlife Crime*, Executive Summary, Washington, DC: TRAFFIC, November 2012
- Symes, William S et al, 'The gravity of the wildlife trade' (2018) 218 *Biological Conservation* 268
- Tella. José J and Fernando Hiralod, 'Illegal and Legal Parrot Trade Shows a Long-Term, Cross-Cultural Preference for the Most Attractive Species Increasing Their Risk of Extinction' (2014) 9(9) *PLoS ONE* [s.p.]
- Titeca, Kristof, 'Illegal Ivory as Transnational Organized Crime? An Empirical Study into Ivory Traders in Uganda' (2019) 59 *British Journal of Criminology* 24

- Tompson, Lisa et al, 'Hot Routes: Developing a New Technique for the Spatial Analysis of Crime' (2009) 1(1) *Crime Mapping: A Journal of Research and Practice* 77
- UN ECOSOC, Commission on Crime Prevention and Criminal Justice, Illicit trafficking in protected species of wild flora and fauna and illicit access to genetic resources, Report of the Secretary-General, UN Doc E/CN.15/2003/8 (4 March 2003)
- UN Security Council, *Report of the Secretary-General on the situation in the Central African Republic*, UN Doc S/2013/261 (3 May 2013)
- UN Security Council, *Report of the Secretary-General on the situation in the Central African Republic, 15 June–15 October 2018*, UN Doc S/2018/922 (15 October 2018)
- UNODC, *Criminal Justice Assessment Toolkit*, New York, NY: United Nations, 2006
- UNODC, *Wildlife Crime Status Update 2017*, Research Brief, Vienna: UNODC, 2017
- UNODC, *World Wildlife Crime Report: Trafficking in protected species*, New York, NY: United Nations, 2016
- Van Uhm, Daan, 'Illegal Wildlife Trade to the EU and Harms to the World', in Toine Spapens et al, *Environmental Crime in Transnational Context: Global Issues in Green Enforcement and Criminology*, London: Routledge, 2016 43
- Van Uhm, Daan 'Wildlife and Laundering: Interaction between the under and upper world', in Toine Spapens et al (eds), *Green Crime and Dirty Money*, London: Routledge, 2018, 197
- Warchol, Greg, 'The Transnational Illegal Wildlife Trade' (2004) 17(1) *Criminal Justice Studies* 57
- Wasser, S K et al, 'Genetic assignment of large seizures of elephant ivory reveals Africa's major poaching hotspots' (2015) 349(6423) *Science* 84
- Wiersema, Annecoos, 'Incomplete Bans and Uncertain Markets in Wildlife Trade' (2016) 12 *University of Pennsylvania Asian Law Review* 65
- Yik-Hei Sung and Jonathan Fong, 'Assessing consumer trends and illegal activity by monitoring the online wildlife trade' (2018) 227 *Biological Conservation* 227

Chapter Two

Akteure der Nashornwilderei unter besonderer Berücksichtigung der organisierten Kriminalität

SERAINA WÄSPI

Das vorliegende Kapitel diskutiert die Akteure der Nashornwilderei unter besonderer Berücksichtigung der organisierten Kriminalität. Dabie zeigt sich, dass sich die erste Beschaffungsstufe des illegalen Nashornhornhandels durch eine grosse Pluralität an involvierten Personen auszeichnet, was eine Untersuchung der Nashornwilderei auf Täterebene erschwert. Die Eigenschaften eines Nashornwilderers können nach heutigem Forschungsstand nicht eindeutig beantwortet werden, da qualitative sowie quantitative Studien fehlen. Des Weiteren wird deutlich, dass Akteure der organisierten Kriminalität zwar in die Rekrutierung und Ausrüstung von Nashornwilderern involviert sind, eine Monopolisierung des Handels mit dem Horn von Nashörnern durch Akteure der organisierten Kriminalität jedoch erst auf höheren Stufen der Hornbeschaffungskette stattfindet.

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I. Einleitung

Heute leben noch circa 25 000 Nashörner in Afrika, während ihre Zahl vor 50 Jahren noch in die Hunderttausende ging.¹ Nashornwilderei trägt einen entscheidenden Teil zu dieser rückläufigen Tendenz bei.² Allein in den vergangenen zehn Jahren sollen insgesamt 6 000 afrikanische Nashörner der Wilderei zum Opfer gefallen sein, nachdem bereits zuvor die Wilderei-Zahlen begannen massiv zuzunehmen.³ Der steilste Anstieg kann in Südafrika beobachtet werden, wo über zwei Drittel der afrikanischen Nashörner konzentriert sind. Während dort 2007 13 Nashörner illegal für ihr Horn getötet wurden, stieg diese Zahl nach Berichten der südafrikanischen Regierung im Jahr 2014 auf 1 215 gewilderte Nashörner.⁴ Besorgte Bürger, Naturschutzorganisationen, Regierungen sowie Teile der Literatur sprechen dabei von einer 'Nashorn Wilderei-Krise' (*'rhino poaching crisis'*).⁵

Die Degredation beziehungsweise Vernichtung von Ökosystemen und der daraus folgende irreversible Verlust an Biodiversität wird heute als ernstes Problem betrachtet.⁶ Vor diesem Hintergrund trifft Wilderei sowie insbesondere der Schwund an Nashörnern auf nicht unerhebliches öffentliches Interesse. Am 9. Juni 2014 wurde beispielsweise die Kampagne

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- 1 IUCN. 'IUCN Reports Deepening Rhino Poaching Crisis in Africa' (Webseite, 9. März 2016).
 - 2 Julie Ayling, 'What sustains wildlife crime? Rhino Horn Trading and the Resilience of Criminal Networks' (2013) 16(1) *Journal of International Wildlife Law & Policy* 57, 57.
 - 3 Richard H Emslie et al, *African and Asian Rhinoceroses – Status, Conservation, and Trade*, a report from the IUCN Species Survival Commission (IUCN SSC) African and Asian Rhino Specialist Groups and TRAFFIC to the CITES Secretariat pursuant to Resolution Conf. 9.12 (Rev. Cop15), CITES CoP17 Coc 68 Annex 5 (Juli 2016) 2.
 - 4 Vanda Felbab Brown, *The Extinction Maret: Wildlife trafficking and how to counter it* (2018) 12.
 - 5 Bram Büscher, 'From Biopower to Ontopower? Violent Responses to Wildlife Crime and the New Geographies of Conservation' (2018) 16(2) *Conservation and Society* 157, 160.
 - 6 Secretariat of the Convention on Biological Diversity et al, *Biodiversity and the 2030 Agenda for Sustainable Development: Technical Note* (2011) 1.

‘#whosideareyouon’ in London vorgestellt,⁷ eine Tierschutzkampagne der globalen Initiative ‘United for Wildlife’, einem Zusammenschluss mehrerer grosser Naturschutzorganisationen, unter ihnen der WWF sowie die Internationale Union zur Bewahrung der Natur (International Union for the Conservation of Nature, IUCN).⁸ In seiner Rolle als Präsident der Initiative stellte Prinz William die Kampagne wie folgt vor:

Unsere Kinder sollten nicht in einer Welt ohne Elefanten, Tiger, Löwen und Nashörner leben. Genug ist genug [...]. Wir bitten Sie, sich unserer Seite anzuschliessen. Es ist an der Zeit, sich zwischen den vom Aussterben bedrohten Arten und den Kriminellen zu entscheiden, die sie für Geld töten. Auf welcher Seite stehst du?⁹

Aussagen dieser Art suggerieren, dass zu einem gewissen Grad eine homogene Gruppierung an ‘Kriminellen’ für das Problem der Wilderei verantwortlich gemacht werden kann beziehungsweise, dass eine bestimmte Tätergruppe von Wilderern (was sowohl männliche, wie auch weibliche Personen umfasst) identifiziert werden kann. Doch inwieweit ist ein solcher Fingerzeig in Bezug auf Nashornwilderei möglich? Im vorliegenden Kapitel wird auf diese Thematik genauer eingegangen, indem die Schlüsselakteure der Nashornwilderei genauer beschrieben werden. Ein besonderer Fokus liegt dabei auf der Beantwortung der Frage, inwiefern Nashornwilderei von kriminellen Organisationen begangen oder beherrscht wird.

II. Begrifflichkeiten und Grundproblematik

1. Nashornwilderei

Wilderei bezeichnet die illegale Jagd beziehungsweise die illegale Nutzung von Wildtieren und Wildtier-Ressourcen.¹⁰ Wilderei ist ihrem Namen nach immer illegal. Entweder die gejagten Tiere selbst sind gesetzlich geschützt oder der

7 WWF, ‘The Duke of Cambridge and David Beckham launche #whosideareyouon campaign’, *WWF Updates* (Webseite, 9. Juli 2014).

8 United for Wildlife, ‘United for Wildlife: home’ (Web page, undatiert).

9 Ally Catterick, ‘The Duke of Cambridge and David Beckham Unite for Wildlife’, *Fauna & Flora International, News* (Webseite, 9. Juni 2014).

10 Erica von Essen et al, ‘Deconstructing the poaching phenomenon: A review of typologies for understanding illegal hunting’ (2014) 54 (4) *British Journal of Criminology* 632, 633.

Wilderer jagt auf einem Gebiet, in dem die Jagd eingeschränkt oder verboten ist.¹¹

Im Falle der Wilderei von Nashörnern trifft oft beides zu: Wilderer töten ein geschütztes Tier und sie dringen in Naturschutzgebiete wie Reservate und Nationalparks ein, um dies zu tun.¹² Hervorzuheben ist, dass begleitend zur Primäraktivität, das heisst, der Tötung des Tieres, bei der Nashornwilderei in der Praxis ein hohes Potential für sogenannte 'Crossover-Kriminalität' festgestellt werden kann. Von Crossover-Kriminalität wird in diesem Zusammenhang gesprochen, wenn zur Erreichung des kriminellen Hauptziels weitere strafbare Handlungen verübt werden.¹³ Die südafrikanischen Behörden haben im Zusammenhang mit Nashornwilderei folgende Delikte festgestellt: illegale Jagd, Genehmigungsverletzungen, Verletzungen des nationalen *Biodiversitätsgesetzes* (NEMBA)¹⁴, Verstösse gegen das *Gesundheits- und Arzneimittelgesetz*,¹⁵ Verstösse gegen die Vorschriften im Bereich ziviler Luftfahrt,¹⁶ Korruption, Betrug, Geldwäscherei und Verstösse gegen das *Übereinkommen über den internationalen Handel mit gefährdeten Arten freilebender Tiere und Pflanzen* (CITES).¹⁷

Auch Gewalt gegen und die Ermordung von Parkwächtern durch Wilderer ist nicht ungewöhnlich. In den letzten zehn Jahren wurden weltweit mehr als tausend Ranger bei der Ausübung ihres Dienstes in Konfrontation mit Wilderern getötet.¹⁸ Entlang der Beschaffungskette für das Horn des Nashorns (fortan: Horn) ist zudem Korruption häufig und erleichtert auf hoher, mittlerer

11 Ronald Orenstein, *Ivory, Horn and Blood: Behind the Elephant and Rhinoceros Poaching Crisis* (2013) 45.

12 Ibid; Julie Cheung, 'Implementation and Enforcement of CITES: An Assessment of Tiger and Rhinoceros Conservation Policy in Asia' (1995) 5(1) *Washington International Law Journal* 125, 143.

13 Glen William Wright, 'Conceptualising and combating transnational environmental crime' (2011) 14(4) *Trends in Organized Crime* 332, 334.

14 *National Environmental Management: Biodiversity Act 2014* (RSA) s 9.

15 *Medicine And Related Substances Act 1965* (RSA) s 30.

16 *Civil Aviation Act 2009* (RSA) s. 11.1.

17 *Convention on international trade in endangered species of wild fauna and flora*, eröffnet zur Unterzeichnung 3. März 1973, 994 UNTS 243 (in Kraft getreten 1. Juli 1975).

18 Rachel Love Nuwer, *Poached: Inside the dark world of wildlife trafficking* (2018) 208.

und niedriger Ebene den Handel mit Horn.¹⁹ Bestechungen des Parkpersonals durch potentielle Nashornwilderer sind dabei nicht unüblich.²⁰

2. Sozialhistorische Auslegung

Manche Autoren argumentieren, dass der Begriff 'Wilderei' bereits Annahmen über die wichtigsten Merkmale des Delikts treffe, was eine neutrale Anschauung der Umstände einer Tat im konkreten Fall verunmögliche. In diesem Zusammenhang wird hervorgehoben, dass der Begriff die Konnotation von Diebstahl hat, weshalb der als neutraler angesehene Terminus 'illegale Jagd' bevorzugt werden sollte.²¹ Rosaleen Duffy weist zudem darauf hin, dass die Definierung von bestimmten Jagdpraktiken als Wilderei zeigt, dass der Naturschutz nicht nur eine Reaktion auf illegale Aktivität ist, sondern selbst an der Schaffung und Aufrechterhaltung von Illegalität beteiligt ist.²²

Die Definition von Wilderei bezieht sich auf Eigentumsrechte, die häufig umstritten sind, wenn es sich um Schutzgebiete und privates Land im globalen Süden handelt.²³ Vor allem im Süden von Afrika ist dabei eine ethnische Komponente nicht abzustreiten. Annette Hübschle betont beispielsweise, dass während wohlhabende, meist weisse Trophäenjäger in einigen Staaten Wildtiere gegen Gebühr jagen können, Einheimische mit begrenzten Ressourcen als Wilderer stigmatisiert werden, wenn sie ein Land zur Jagd betreten, das früher ihnen gehörte.²⁴ Eine solche Stigmatisierung kann gemäss Studien einen Effekt auf die Härte sowie Brutalität der Strafverfolgung beziehungsweise der Wilderei-Bekämpfungs-Strategien haben. Elizabeth Lunstrum stellte bei der Befragung von Rangern im Krüger Nationalpark fest, dass Nashörner oft als Teil des reichen Naturerbes der Nation und Wilderer als grenzverletzende Dezimatoren dieses Erbes angesehen werden. Das führt im

19 Louise Shelley, *Dark Commerce: How a new illicit economy is threatening our future* (2018) 104.

20 Nuwer (n 18) 216.

21 Von Essen et al (n 10) 633.

22 Rosaleen Duffy, *Nature Crime: How we are getting conservation wrong* (2010) 110.

23 Annette M Hübschle, 'The social economy of rhino poaching: of economic freedom fighters, professional hunters, and marginalized local people' (2017) 65(3) *Current Sociology* 427, 430.

24 Annette M Hübschle, *A Game of Horns: Transnational Flows of Rhino*, Dissertation, Universität Köln (2016) 36.

Ergebnis zu einer stark militarisierten und zunehmend gefährlichen Landschaft, das heisst einer zunehmenden Gewaltbereitschaft in der Bekämpfung der Wilderer.²⁵ Bram Büscher hebt hervor, dass die Definition von Wilderei als Delikt gegen die Natur und zukünftige Generationen und die damit verbundenen Emotionen gewaltsame Bekämpfungsmethoden akzeptabler erscheinen lassen.²⁶

Zusammenfassend kann festgehalten werden, dass die Definition von Wilderei nicht rein juristisch, wie unter vorgängigem Titel ausgeführt wurde, erfolgen kann. Das Verständnis von 'Wilderei' hängt nicht nur von rechtlichen, sondern auch von politischen, ethnischen und sozialen Faktoren ab, welche je nach Land und Region differenziert betrachtet werden müssen.

III. Täter: Ein Überblick

Die Struktur einer illegalen Wirtschaftsordnung bestimmt nachweislich die Wirksamkeit politischer Intervention. Anders ausgedrückt: Die Gestaltung von Strafverfolgungsstrategien sollte als Reaktion darauf erfolgen, wie illegale Wilderei- und Schmuggelnetzwerke organisiert sind.²⁷ Es gibt einen bemerkenswerten Unterschied zwischen Schmuggel, der durch eine hierarchisch strukturierte, organisierte kriminelle Gruppierung begangen wird und Wilderei, die von vielen Einzelnen aus finanzieller Not betrieben wird.

Verschiedene Wissenschaftler hinterfragen heute die weitverbreitete Meinung,²⁸ hoch organisierte, hierarchische Organisationen für die dominante Form von Wildtierschmuggel und Wilderei zu halten.²⁹ Der illegale Handel mit Horn ist Berichten zufolge jedoch eine der strukturiertesten kriminellen Ak-

25 Elizabeth Lunstrum, 'Green Militarization: Anti-Poaching Efforts and the Spatial Contours of Kruger National Park' (2014) 104(4) *Annals of the Association of American Geographers* 816, 818.

26 Bram Büscher, '„Rhino Poaching Is out of Control!“ Violence, Race and the Politics of Hysteria in Online Conservation' (2016) 48(5) *Environment and Planning A: Economy and Space* 979, 989.

27 Andrew M Lemieux, *Situational Prevention of Poaching* (2014), 25.

28 Misha Glenny, 'The strange figures behind a secret trade', *BBC News* (Webseite, undatiert).

29 Felbab Brown (n 4) 95.

tivitäten, welche *CITES* zuwiderlaufen.³⁰ So wird in der Literatur die Monopolmacht weniger krimineller Organisationen an verschiedenen Stellen der illegalen Horn-Beschaffungskette thematisiert.³¹ Ein Bericht von TRAFFIC, einer Nichtregierungsorganisation, die sich mit Tierschutz befasst, spricht in diesem Zusammenhang von dynamischen und komplexen Horn-Schmuggelrouten krimineller Netzwerke.³² Eine Professionalisierung und entsprechende Intensivierung des Handels an verschiedenen Stellen der illegalen Horn-Beschaffungskette kann dementsprechend bemerkt werden, sie sollte jedoch zumindest auf der Stufe der Nashornwilderei nicht *a priori* angenommen werden.

In Bezug auf die Rollenverteilung der kriminellen Organisation der afrikanischen Nashornwilderei und des Hornhandels ist in der Literatur ein fünfstufiges Modell vorherrschend.³³ Die schematische Struktur erfasst die gesamte Handelskette, vom Wilderer auf lokaler Ebene in meist afrikanischen Staaten bis zum Endverbraucher.³⁴ Der Fokus dieses Kapitels liegt auf den ersten beiden Stufen der Handelskette. Die erste Stufe repräsentiert dabei Einzelpersonen und sogenannten 'ad hoc-Banden', die direkt in die Wilderei der Nashörner involviert sind. Sie umfasst auch Individuen, welche indirekt in die Nashornwilderei involviert sind, das heisst Personen, die den Wilderern verschiedene Arten von Unterstützung anbieten. Die zweite Stufe umfasst besser organisierte Wilderei-Gruppierungen und schliesst insbesondere Wilderer mit ein, die in mobilen, weniger temporären Gruppierungen beziehungsweise Wilderei-Banden tätig sind. Nach Tom Milliken würden solche Gruppierungen auch als lokale Kuriere und niederrangige Käufer fungieren.³⁵ Ein weiterer Akteur dieser zweiten Stufe ist zudem der sogenannte 'kingpin'. Dieser Mit-

30 Tom Milliken, *Illegal Trade in Ivory and Rhino Horn: An Assessment to Improve Law Enforcement under the Wildlife TRAPS Project*, TRAFFIC Report (2014) 17.

31 Rod Campbell, *Horn of Contention: A review of literature on the economics of trade in rhino horn* (2013) 16; Erwin H Bulte, und Richard Damania, 'An Economic Assessment of Wildlife Farming and Conservation' (2005) 19(4) *Conservation Biology* 1222, 1227.

32 Sade Moneron, Nicola Okes und Julian Rademeyer, *Pendants, Powder and Pathways, A rapid assessment of smuggling routes and techniques used in the illicit trade in African rhino horn*, TRAFFIC REPORT (September 2017) 2.

33 Nuwer (n 18) 188; Milliken (n 30) 17; Annette Hübschle, 'Security Coordination in an Illegal Market: The Transnational Trade in Rhinoceros Horn' (2016) 43(2) *Politikon* 193, 195; Kenly Greer Fenio, *Poaching Rhino Horn in South Africa and Mozambique: Community and Expert Views from the Trenches* (2014) 12.

34 Milliken (n 30) 17.

35 Ibid.

telsmann stellt stellt laut Vanda Felbab-Brown die lokale Spitze des Wilderei-Netzwerkes dar.³⁶ Er bildet die Brücke zwischen Angebot und Nachfrage, indem er die Übergabe des Hornes von lokalen Wilderern zu entsprechenden Kurieren überwacht. Zudem ist er für die Rekrutierung der genannten Wilderei-Banden zuständig.³⁷

Nachfolgend werden die erwähnten Wilderer, das heisst die unterste Stufe der Handelskette genauer beschrieben. In einem zweiten Schritt wird aufgezeigt, ob und wie sie sich in Gruppen organisieren.

IV. Individualtäter

1. Demographische Merkmale

1.1. Herkunftsort

Demographische Studien betreffend Nashornwilderern sind spärlich verfügbar beziehungsweise werden kaum durchgeführt. Informationen lassen sich jedoch aus Studien basierend auf Interviews mit Park-Rangern gewinnen. Ranger in Südafrika stellen mitunter fest, dass die Wilderer, die sie festnehmen müssen, ihre eigenen Nachbarn oder sogar Familienmitglieder sind. Ein Ranger im Krüger Nationalpark sah sich beispielsweise gezwungen, einen ehemaligen Arbeitskollegen, welcher zu wildern begonnen hatte, zu 'neutralisieren'.³⁸

Laut Sam Weru würden manche Wilderer in Kenya aus armen Nachbarsländern wie Somalia einreisen, um Nashörner zu wildern. Hauptsächlich seien es jedoch lokale Anwohner mit überdurchschnittlichem Wissen des Terrains und dem Verhalten der Tiere.³⁹ Eine ähnliche demographische Situation findet sich in Asien. Eine Studie aus dem Jahr 2009 hat gezeigt, dass lokale Wilderer im

³⁶ Felbab Brown (n 4) 95; Tom Milliken und Jo Shaw, *The South Africa-Viet Nam Rhino Horn Trade Nexus: A Deadly Combination of Institutional Lapses, Corrupt Wildlife Industry Professionals, and Asian Crime Syndicates*, TRAFFIC REPORT (2012) 109.

³⁷ Hübschle (n 33) 202.

³⁸ Nuwer (n 18) 193.

³⁹ Sam Weru, *Wildlife protection and trafficking assessment in Kenya: Drivers and trends of transnational wildlife crime in Kenya and its role as a transit point for trafficked species in East Africa*, TRAFFIC Report (Mai 2016) 35.

Chitwan Valley Nationalpark, welcher die zweitgrösste Population des indischen Nashorns beherbergt, ebenfalls aus armen und landlosen Gruppen rund um den Park stammen.⁴⁰ In die Wilderei indirekt involvierte Personen, das heisst solche, die verschiedene Hilfestellungen anbieten, stammen naturgemäss ebenfalls aus der Nähe des betroffenen Naturschutzgebietes. Zum Beispiel gaben Anwohner in Justicia, einem südafrikanischen Dorf ausserhalb von Sabi Sand (einem privaten Tierpark) an, dass man bis zu USD 1 000 pro Nacht verdienen könne, wenn man einem Wilderer Unterschlupf gewähre, wenn er auf dem Weg in oder aus dem Park sei.⁴¹

Solche Aussagen können jedoch nicht generalisiert werden. Ranger des Lewa-Nationalparks im Norden Kenyas machten zum Beispiel gegenteilige Erfahrungen. Ihrer Erfahrung zufolge stammen die meisten Nashorn-Wilderer nicht aus den umliegenden Dörfern. Die meisten seien ehemalige Angehörige des Militärs und mit gut organisierten 'kriminellen Kartellen' verbunden.⁴²

1.2. Ethnischer Hintergrund

Eine Studie, welche von Andrew Lemieux zwischen Januar und Mai 2011 im Krüger Nationalpark durchgeführt wurde, ergab, dass in dieser Zeitspanne insgesamt 55 potentielle Nashorn-Wilderer verhaftet wurden. Von diesen 55 Personen waren sämtliche männlich und 96 % Schwarzafrikaner.⁴³ Dass in Afrika weisse Wilderer in der Minderheit seien, hält auch Adam Welz, der Direktor von WildAid Südafrika, einer Nichtregierungsorganisation, welche sich gegen Wildtierwilderei und den Konsum von Wildtierprodukten einsetzt, fest. Weisse Wilderer seien jedoch in Südafrika im Schnitt besser vorbereitet, da sie besseren Zugang zu high-tech Materialien wie Hubschraubern hätten.⁴⁴

Berichten zufolge hat die Wilderei-Krise in Südafrika zudem zu einer Zunahme von Wilderern aus der weissen Oberschicht geführt. In der Literatur, wie auch im Volksmund, werden diese Täter auch '*khaki collar criminals*'

40 Mahesh Poudyal, Kristina Rothley und Duncan Knowler, 'Ecological and Economic Analysis of Poaching of the Greater One-Horned Rhinoceros (Rhinoceros Unicornis) in Nepal' (2009) 19(7) *Ecological Applications* 1693, 1706.

41 Greer Fenio (n 33) 12.

42 Nuwer (n 18) 194.

43 Lemieux (n 27) 31.

44 David Smith, 'Thousand of rhinos, 500 poachers; grim toll in the hunt for prized horns', *The Guardian* (online), 18. Oktober 2015.

bezeichnet.⁴⁵ Diese Art Wilderer würden mehrheitlich aus der Wildtierindustrie stammen. Grundbesitzer, Veterinäre und professionelle Jäger würden auf Privatgrundstücken und in privaten Nashorn-Reservaten mit schweren Kalibergewehren im militärischen Stil Nashörner jagen.⁴⁶ Wie umfangreich dieses Phänomen innerhalb der südafrikanischen Wildtierindustrie ist, lässt sich nur schwer quantifizieren. Nach Tom Milliken und Jo Shaw bleibt es jedoch eine ernsthafte, korrumpierende Kraft, die den Nashornschutz untergräbt und das Image einer Gemeinschaft beeinträchtigt, die an der Spitze des Wildtierschutzes stehen sollte.⁴⁷

1.3. Alter

Lemieux's Studie von 2011 ergab weiter, dass nur bei 22 der 55 verhafteten Personen das Alter dokumentiert werden konnte. Dies war der Tatsache zuzuschreiben, dass viele der Verhafteten, vor allem aus Mosambik stammenden Individuen, sich nicht ausweisen konnten oder das Geburtsdatum nicht bekannt war. Von den 22 dokumentierten Wilderern waren 41 % zwischen 20 und 29 Jahre alt, 41 % zwischen 30 und 39 und 18 % älter als 40.⁴⁸ Obwohl nicht repräsentativ, scheint diese Studie zu zeigen, dass Alter keine definierende Charakteristik bei Nashornwilderern zu sein scheint.

Wissenschaftler betonen in diesem Zusammenhang sogar, dass höheres Alter einen Vorteil bringen kann, da ältere Wilderer einen grösseren Erfahrungsschatz mitbringen und insofern besser geeignet für führende Positionen in einer Wilderei-Gruppierung sind.⁴⁹ Felbab Brown führt dazu aus, dass gerade pensionierte Ranger zwischen 50 und 70 Jahren in Afrika eine Wilderei-Risikogruppe bilden würden. Sollten sie signifikante Kürzungen in Lohn oder Rente erfahren, würden sie zu einem optimalen Rekrutierungsziel für Wilderei-Netzwerke in der Region werden. Ihre überdurchschnittlichen Kenntnisse von Wilderei-Bekämpfungsmethoden und Tierbewegungsmuster mache

45 Melanie Gosling, 'Khaki-Collar-Crime a growing evil', *IOL* (online), 14. Dezember 2011.

46 Orenstein (n 11) 87.

47 Milliken und Shaw (n 36) 75.

48 Corné Eloff, 'Rhino poaching in South Africa – is it a losing battle' (2012) Jan/Feb *PositionIT* 57; Lemieux (n 27) 32.

49 Lemieux (n 27) 32.

sie zu wertvollen Mitgliedern jeder Wilderei-Gruppe.⁵⁰ Noch ist dieses Phänomen aber nicht näher wissenschaftlich quantifiziert.

1.4. Einkommen

Armut stellt ein wichtiges vermutetes Motiv für Wilderei dar.⁵¹ Hierzu ist jedoch festzuhalten, dass die genaue Operationalisierung von Armut in vielen Berichten zumeist schwer nachvollziehbar ist. Meist basiert der erwähnte Einfluss der Einkommensverhältnisse auf die Wilderei auf Anekdoten. So hielt Rachel Nuwer beispielsweise fest, dass ein verhafteter Wilderer auf die Frage, warum er in den Park kam, um Nashörner zu töten, geantwortet haben soll: 'Wir essen Gras.'⁵² Studien, die den Einfluss des Einkommens auf die Wilderei statistisch messen, sind kaum vorhanden. Der behauptete Zusammenhang zwischen Armut, Einkommen und Wilderei ist daher aus wissenschaftlicher Perspektive nur schwach gestützt.

Soziologen und Kriminologen haben Behauptungen entkräftet, dass wirtschaftlich schlechter gestellte Personen anfälliger für kriminelle Verhaltensweisen, im vorliegenden Fall Nashornwilderei, sind.⁵³ Eine Studie von 2017, welche den sozioökonomischen Status von Wilderern in Tansania untersuchte, fand eine hohe demographische und haushaltswirtschaftliche Heterogenität unter den Haushalten in denen Mitglieder in der illegalen Jagd nach Buschfleisch partizipierten. Die Studie ergab, dass Wilderer zwar stark motiviert sind, durch Wilderei ihr Einkommen zu verbessern, jedoch nicht unbedingt die 'Ärmsten der Arme' einer Dorfgemeinschaft darstellen.⁵⁴ Stattdessen deuteten die Ergebnisse dieser Studie darauf hin, dass die subjektive Sichtweise eines Wilderers auf den finanziellen Status seines Haushaltes, vor allem auch im Vergleich mit anderen Haushalten im Dorf, die Häufigkeit und die

50 Felbab Brown (n 4) 127.

51 Ibid 99; Greer Fenio (n 33) 3; Shelley (n 19) 92.

52 Nuwer (n 18) 189.

53 Robert K Merton, 'Social Structure and Anomie' (1938) 3 (5) *American Sociological Review* 672, 681; Travis Hirschi, 'Procedural Rules and the Study of Deviant Behavior' (1973) 21(2) *Social Problems* 159, 163.

54 Eli J Knapp, Nathan Peace und Lauren Bechtel, 'Poachers and Poverty: Assessing Objective and Subjective Measures of Poverty among Illegal Hunters Outside Ruaha National Park, Tanzania' (2017) 15(1) *Conservation and Society* 24, 24.

Dauer von Wildereiaktivitäten beeinflusst.⁵⁵ Die Partizipation beim Wildern, welche unabhängig vom tatsächlichen Einkommen, Vermögen oder den Viehbeständen eines Haushalts stattfindet, deutet auf die Wichtigkeit hin, dass sich Haushalte reich fühlen, unabhängig davon, ob sie es wirklich sind oder nicht. In der Literatur nennt sich dieses Phänomen relative Armut.⁵⁶

Die Ergebnisse der genannten Studie würden somit darauf hindeuten, dass sich Wilderei-Bekämpfungsstrategien nicht bloss auf die unterste Schicht einer Gesellschaft beziehungsweise einer Dorfgemeinschaft konzentrieren sollten, sondern auch wirtschaftlich stärkere Haushalte miteinschliessen müssten. Zusammenfassend kann wegen mangelnder wissenschaftlicher Grundlagen nicht *a priori* festgestellt werden, dass Nashornwilderei ein blosses 'arme Leute-Delikt' ist.

2. Weiter Unterscheidungsmerkmale

In der Literatur lassen sich verschiedene Kategorisierungsformen von Wilderern finden.⁵⁷ So wird beispielsweise zwischen dem existenziellen Wilderer (*subsistence poacher*) und dem kommerziellen Wilderer (*commercial poacher*) unterschieden. Die Kategorien beziehen sich hauptsächlich auf die unterschiedliche Motivation und die wirtschaftliche Situation potentieller Wilderer.⁵⁸ Die Übergänge zwischen dem existenziellen und dem kommerziellen Wilderer sind jedoch fließend. Ein Individuum kann im Endeffekt Elemente beider Typen aufweisen.⁵⁹

Der existenzielle Wilderer wird in der Literatur als Täter charakterisiert, der aus einer ökonomischen Notwendigkeit heraus handelt. Seine kriminelle Motivation begründet sich also hauptsächlich in seiner Armut. Nicht entscheidend ist, ob das gewilderte Tier zur persönlichen Nutzung, insbesondere

⁵⁵ Ibid 31.

⁵⁶ Daniel W S Challender und Douglas C MacMillan, 'Poaching Is More than an Enforcement Problem' (2014) 7(5) *Conservation Letters* 484, 487.

⁵⁷ Von Essen et al (n 10) 638.

⁵⁸ Jessica S Kahler und Meredith L Gore, 'Beyond the Cooking Pot and Pocket Book: Factors Influencing Noncompliance with Wildlife Poaching Rules' (2012) 36(2) *International Journal of Comparative and Applied Criminal Justice* 103, 104.

⁵⁹ Rosaleen Duffy und Freya A V St John, *Poverty, Poaching and Trafficking: What are the Links?* (June 2013) 2.

als Nahrung oder zum Weiterverkauf verwendet werden soll.⁶⁰ Existentielle Wilderei von Nashörnern involviert typischerweise Personen, die nahe an Naturschutzgebieten und Reservaten wohnen. Vor 2008 machte diese Art von Wilderei die Mehrheit der Vorfälle von Nashornwilderei aus, sie ist jedoch heute kein so häufiges Phänomen mehr.⁶¹ Obwohl einem Bericht zufolge Nashörner auch für ihr Fleisch gejagt werden, ist der bereits behandelte Anstieg in Nashornwilderei nicht auf Fleischkonsum zurückzuführen. Eine Verbindung zwischen Nashornwilderei und dem Markt von Buschfleisch wird selten festgestellt.⁶²

Es sei an dieser Stelle auch auf den opportunistische Wilderer (*opportunistic poacher*) hingewiesen. Dieser zeichnet sich dadurch aus, dass er wildert, weil die Gelegenheit dazu besteht und nicht aus ökonomischer Not heraus. Opportunistische Wilderer haben in der Regel bis kurz vor der Tat keine Absicht oder keinen Vorsatz zu wildern.⁶³ Ein Nashornwilderer, auch ein sehr motivierter, wird jedoch nie erfolgreich ein Nashorn wildern können, wenn er sich keinen Zugang zu einem Nationalpark beziehungsweise einem Nashornreservat verschafft und er in der Folge das Tier nicht lokalisieren kann. In diesem Sinne braucht Nashornwilderei immer ein gewisses Mass an Vorbereitung und Determination. Allerdings hat der Ruf, dass mit der Nashornwilderei hohe Einnahmen verbunden sein können, dazu geführt, dass Amateure die Gelegenheit nutzen und sich zu chaotischen, schlecht geplanten Nashornjagden aufmachen. Vertreter dieser opportunistischen Wilderer sind zum Beispiel Touristen beziehungsweise Besucher eines Nationalparks oder auch sogenannte *'thrill seekers'*.⁶⁴

Kommerzielle Wilderer operieren typischerweise in Gruppen und jagen hauptsächlich wirtschaftlich wertvolle Arten wie Elefanten und Nashörner.⁶⁵ Der kommerzielle Wilderer ist somit auch ein Spezialist (*specialist poacher*). Das heisst, er beschränkt seine Jagd auf erwähnte wertvolle Spezies. Dem kommerziellen Wilderer beziehungsweise dem Spezialisten wird unterstellt, dass er nicht aus existenziellen Nöten heraus handelt. Seine Tat basiert auf

60 Tanya Wyatt, *Wildlife Trafficking, a Deconstruction of the Crime, the Victims and the Offenders* (2013) 84.

61 Lemieux (n 27) 24.

62 Ibid 40.

63 Wyatt (n 60) 84.

64 Hübschle (n 33) 200.

65 Duffy und St John (n 59) 2.

einer rationalen Entscheidung; sie erfolgt nach einer Abwägung des versprochenen Gewinns und der Wahrscheinlichkeit, erwischt zu werden.⁶⁶

Nach einem entsprechenden Modell von Erwin Bulte und Richard Damania betreiben Individuen Wilderei, solange der Preis, den sie von den Händlern erhalten, die Kosten der Wilderei decken. Die Kosten der Wilderei umfassen die Risiken des Fangs, die Zeit bei der Suche nach Tieren, die Preise für Waffen, Fahrzeuge und andere Ausrüstungen sowie alle Einnahmen, die den Betroffenen durch die Nichtausführung anderer bezahlter Tätigkeiten das heisst anderer Beschäftigungsmöglichkeiten entgangen sind.⁶⁷ Die These, dass die Entscheidung zu wildern von einer solchen Kosten-Nutzen Analyse – im Rahmen ökonomischer Modelle des menschlichen Verhaltens – getragen wird, findet sich auch an anderen Stellen in der Literatur.⁶⁸ Die kommerzielle Art der Wilderei ist Berichten zufolge hauptsächlich verantwortlich für den beschriebenen Anstieg von Nashornwilderei in Afrika.⁶⁹

Die genannten Kategorisierungen sind insofern hilfreich, als sie die verschiedenen potentiellen Grundmotivationen eines Individuums auf einer mikroökonomischen Ebene aufzeigen. Die Bekämpfung der Nashornwilderei erfordert jedoch ein Verständnis der menschlichen Entscheidungsfindung, das über diese Ebene hinausgeht.

V. Gruppen und Netzwerke

Einzelpersonen formen kollektiv sogenannte Nashornwilderei-Netzwerke, welche die erste Phase des Hornhandels entscheidend prägen. Ob diese Netzwerke als organisiert im Sinne von organisierter Kriminalität qualifiziert werden können, ist jedoch fraglich.

Das Verständnis von organisierter Kriminalität, auf welchem das vorliegende Kapitel basiert, richtet sich nach dem *Übereinkommen der Vereinten Nationen*

66 Wyatt (n 60) 85.

67 Bulte und Damania (n 31) 1225.

68 Jason Shogren und John Tschirhart, *Protecting endangered species in the United States: biological needs, political realities, economic choices* (2001) 39; Campbell (n 31) 23.

69 Lemieux (n 27) 25.

über die grenzüberschreitende Kriminalität.⁷⁰ Artikel 2(1)(a) dieses Übereinkommens definiert die 'organisierte kriminelle Gruppe' als eine

strukturierte Gruppe von drei oder mehr Personen, die eine gewisse Zeit lang besteht und gemeinsam mit dem Ziel vorgeht, eine oder mehrere schwere Straftaten oder in Übereinstimmung mit dem Übereinkommen umschriebene Straftaten zu begehen, um sich unmittelbar oder mittelbar einen finanziellen oder sonstigen materiellen Vorteil zu verschaffen.

Eine 'strukturierte Gruppe' muss eine gewisse Beständigkeit aufweisen, das heisst, sie darf sich nicht nur zur unmittelbaren Begehung einer Straftat geformt haben. Sie muss jedoch keine formal definierten Rollen, keine kontinuierliche oder eine ausgeprägte Struktur aufweisen (Art. 2(1)(c)).

Die von dem Übereinkommen erfassten Aktivitäten müssen zudem grenzüberschreitender Natur sein (Art. 3(1), (2)). Wildtierschmuggel ist, wie einige andere Umweltdelikte, von Natur aus grenzüberschreitend, da illegale Waren über nationale Grenzen hinweg befördert wird oder die Auswirkungen der Kriminalität über Grenzen hinaus Auswirkungen oder Ursachen haben.⁷¹ Im Falle der Nashornwilderei wird das transnationale Element augenfällig, sofern die Distanz zwischen Wilderern und Konsument in Betracht gezogen wird, die oft kontinentalübergreifend ist.⁷² Jede Gruppe, die ein Glied in der Lieferkette für den illegalen Handel von Horn bildet, könnte dementsprechend gemäss vorliegendem Verständnis als 'organisierte kriminelle Gruppe' bezeichnet werden, sofern sie dann i.S. des Übereinkommens genügend strukturiert ist.

Noch vor 15 Jahren hielt Greg Warchol in diesem Zusammenhang fest, dass Nashorn-Wilderer in Afrika oft ungeübt und unausgerüstet sind und selten Kontakte zu kriminellen Netzwerken pflegen.⁷³ Inwiefern dieser Feststellung heute noch beigespflichtet werden kann, wird nachstehend ausgeführt.

70 Eröffnet zur Unterzeichnung 15. November 2000, 2225 UNTS 209 (in Kraft getreten 29 September 2003).

71 Wright (n 13) 336.

72 Andrea Crosta, Kimberly Sutherland und Chiara Talerico, *Grinding Rhino, Operation Red Cloud, An Undercover Investigation on Rhino Horn Trafficking in China and Vietnam*, EAL Investigative Report (Juli 2017) 5.

73 Greg L Warchol, 'The Transnational Illegal Wildlife Trade' (2004) 17(1) *Criminal Justice Studies* 57, 65.

1. Wilderei-Banden

Wilderei-Expeditionen in Parks und Nashornreservate reichen von gut organisierten, gut geplanten und professionell durchgeführten Jagden bis hin zu opportunistischen und manchmal chaotischen Vorgängen.⁷⁴ Gemäss Umfragen im Gebiet des Krüger und Limpopo Nationalpark in Südafrika können zwei verschiedene Arten von 'Wilderei-Banden' unterschieden werden: die 'opportunistische' und die 'professionelle Bande':

Die bereits thematisierten opportunistischen Gruppierungen sind eher zufällig zusammengestellte Gruppen mit dem alleinigen Ziel, gemeinsam einen Nationalpark, ein Reservat zu betreten, um ein Nashorn zu jagen. Im Falle einer Festnahme oder Tod sind weder Kautions- noch Lebensversicherung Teil des Arrangements.⁷⁵ Die 'professionelle Bande' zeichnet sich durch eine bessere Organisation aus. Sie wird in der Regel von einem Mittelsmann oder *kingpin* koordiniert. Dieser organisiert die Gruppe, das heisst, er rekrutiert ihre Teilnehmer und stellt ihnen Waffen und Transportmittel zur Verfügung.⁷⁶ Im Fall einer Festnahme wird dem Wilderer die Zahlung der Kautions- oder der Zugang zu einem Strafverteidiger versprochen; im Todesfall eine Lebensversicherung beziehungsweise finanzielle Hilfe für die Hinterbliebenen.⁷⁷ Diese versprochenen Vorteile werden gemäss Interviews mit Nashornwilderern in der Realität nicht tatsächlich ausgerichtet.⁷⁸ Ursprünglich fand eine Rekrutierung nur unter den Wilderern aus den örtlichen Dörfern statt. Mittelsmänner suchten nach Männern mit Fährten- oder Jagdfähigkeiten, die gut in ihren Gemeinschaften eingebettet waren.⁷⁹ Wilderer wurden zum Beispiel unter Besuchern der lokalen Tavernen (*shebeens*) gefunden.⁸⁰ Gemäss Hübschle sind in letzter Zeit jedoch Veränderungen zu beobachten, indem auch Wilderer von ausserhalb rekrutiert werden, die von den vermutlich hohen Profiten des Hornhandels gehört haben.⁸¹

74 Hübschle (n 33) 200.

75 Greer Fenio (n 33) 14.

76 Shelley (n 19) 90.

77 Greer Fenio (n 33) 14.

78 Hübschle (n 33) 200.

79 Weru (n 39) 9; Timothy C Haas und Sam M Ferreira, 'Combating Rhino Horn Trafficking: The Need to Disrupt Criminal Networks' (2016) 11(11) *PLoS ONE* [s.p.], 2.

80 Shelley (n 19) 90.

81 Hübschle (n 33) 201.

Südafrikanische Forscher haben festgestellt, dass Wilderer, die einst in den Minen zusammengearbeitet oder gemeinsam im Gefängnis gesessen haben, aus Grossstädten in den Krüger Nationalpark reisen, um die Nashörner zu wildern.⁸² Mit anderen Worten, lokale, bereits bestehende kriminelle Netzwerke, werden auf der ersten Stufe der Beschaffungskette genutzt.

Wilderei-Banden stellen sich aus mindestens drei Personen zusammen: einem Anführer, einem Schützen und einem Fahrer.⁸³ Meist wird ein Gewehr, Nahrung und Wasser sowie eine Axt, um das Horn vom Kopf trennen zu können, mitgeführt.⁸⁴ Ein Anführer kann Berichten zufolge auch mehrere Gruppen leiten. Die Gruppen teilen untereinander auch Ausrüstung wie Waffen und Fahrzeuge.⁸⁵ Julian Rademeyer zufolge habe trotzdem jede Bande ihre eigenen individuellen Merkmale: die benutzten Schuhe, die hinterlassenen Spuren, die eingesetzten Waffen sowie die Anti-Tracking Methoden, die sie typischerweise anwende.⁸⁶

Die hierarchisch strukturierten und vertikal integrierten Netzwerke versuchen nicht unbedingt, die eher opportunistischeren Wilderei-Banden zu beseitigen. Berichten zufolge bevorzugen *kingpins* in Südafrika sogar die gleichzeitige Jagd auf Nashörner und sie tolerieren Jagdgruppen, die unabhängig von ihnen arbeiten.⁸⁷ Durch die Simultanität der Aktionen wird erhofft, dass sich die Möglichkeit der Konfrontation mit Anti-Wilderei Personal verringern lässt. So würden laut Interviews mit *kingpins* und Wilderern in Südafrika die eher unorganisierten Banden als 'Kanonenfutter' dienen.⁸⁸

2. Wilderei-Netzwerke

Die einzelnen Gruppierungen beziehungsweise Wilderei-Banden können Berichten zufolge Teil von mehr oder weniger fluiden Wilderei-Netzwerken am

82 Shelley (n 19) 90.

83 Hübschle (n 24) 34; Hendrik Daffue und Elise Daffue, *Behind the trigger: the many faces of rhino poaching* (2016) 13.

84 Greer Fenio (n 33) 11.

85 Ibid; Daffue und Daffue (n 83) 4.

86 Julian Rademeyer, *Tipping Point: Transnational organised crime and the 'war' on poaching*, Part 1 of a 2-part investigation into rhino horn trafficking in Southern Africa (Juli 2016) 24.

87 Felbab Brown (n 4) 93.

88 Hübschle (n 24) 321.

unteren Ende der Beschaffungskette gebildet werden. Weru beschreibt ein solches Wilderei-Netzwerk wie folgt: ein Zwischenhändler verbindet den Wilderer oder die Wilderei-Bande mit einem lokalen Transporter, welcher die Ware, das heisst das Horn, an einen anderen Zwischenhändler liefert, der das Horn an den *kingpin* weitergibt. Der *kingpin* finanziert das Wilderei-Netzwerk und koordiniert den Schmuggel der Ware über Bezirks- und Ländergrenzen hinweg.⁸⁹

Mittelsmänner bilden entscheidende Knotenpunkte in der internationalen Dimension des illegalen Wildtierhandels. Sie organisieren nicht nur lokale Nashornwilderei-Expeditionen, sondern haben Verbindungen zu internationalen Märkten und Hornhändlern. Sie pflegen dabei auch korrupte Verbindungen im öffentlichen und privaten Sektor, zum Beispiel zu Zollbeamten oder politischen Förderern.⁹⁰ Der Einfluss dieser Mittelsmänner wird jedoch teils überzeichnet. Wilderei-Netzwerke beziehungsweise kriminelle Netzwerke allgemein können die Entfernung von Einzelpersonen aus der Beschaffungskette ausgleichen und müssen bei Ausfall eines Mittelmanns ihre Aktivitäten nicht einstellen. Der Terminus *kingpin* wird entsprechend teilweise hinterfragt, da er die Tendenz der in der Realität wohl nicht vorhandenen 'Allmacht' unterstreicht.⁹¹

3. Qualifikationen

Netzwerke in der Art, wie sie beschrieben wurden, sind dementsprechend 'organisiert' im Sinne von 'strukturiert', dass sie in der Lage sind, Wilderei und Hornhandel konstant und erfolgreich durchzuführen. Sie sind jedoch desorganisiert in dem Sinne, dass sie nicht Teil einer formellen Gruppe organisierter Kriminalität sind. Sogenannte '*rhino poaching gangs*', die sich opportunistisch mit dem blossen Ziel der Wilderei eines Nashorns geformt haben und sich nach begangener Tat auflösen, begehen kriminelle Aktivitäten, die zu einem gewissen Grad organisiert sind. Sie fallen jedoch wegen ihrer Kurzlebigkeit nicht unter die Definition nach dem *Übereinkommen der Vereinten Nationen über die grenzüberschreitende Kriminalität*. Es ist also zu unterscheiden zwi-

⁸⁹ Weru (n 39) 20.

⁹⁰ Ibid; Felbab Brown (n 4) 93.

⁹¹ Felbab Brown (n 4) 97.

schen organisierter Kriminalität und Gruppierungen, die organisierte Taten verüben.⁹²

Wie erwähnt, können Zwischenhändler oder *kingpins* enge oder informelle Verbindungen zu besser organisierten Netzwerken haben, die den Hornhandel weiter oben in der Lieferkette kontrollieren. Die Qualifikation solcher besser integrierten Netzwerke als Akteure organisierter Kriminalität im Sinne des Übereinkommens ist zumindest fraglich. Es ist in diesem Zusammenhang festzustellen, dass die Beschaffungskette nach dem Akt der Nashornwilderei organisierter und kontrollierter zu werden scheint. Dieses Phänomen wird auch in Bezug auf andere Aktivitäten der Umweltkriminalität festgestellt.⁹³

4. Organisierte Kriminalität

Wie anfangs bereits angesprochen, betonen zumindest auf internationalem Level eine Vielzahl von Autoren in Bezug auf den Hornhandel die Involvierung von Gruppen im Bereich organisierter Kriminalität.⁹⁴ Solche eher traditionellen Formen der organisierten Kriminalität sollen nachstehend kurz thematisiert werden.

Berichten zufolge jagen heute nur sehr wenige Nashornwilderer beziehungsweise Wilderei-Banden auf eigene Initiative, das heisst, es gibt nur sehr wenige spekulative Nashornwilderei-Expeditionen. Nashörner werden in der Regel nur auf Bestellung getötet. Wer Wilderei in Südafrika und anderen Ländern betreibt, erhält einen Auftrag und Mittel von mehrheitlich asiatischen Auftraggebern auf höheren Ebenen der Beschaffungskette.⁹⁵

Auch Milliken und Shaw hielten in ihrem Report über die Routen des Hornhandels zwischen Südafrika und Vietnam fest, dass eine Präsenz organisierter Kriminalität, insbesondere asiatischer Syndikate, 'ohne Zweifel' präsent sei. Zudem gebe es Hinweise darauf, dass solche illegalen Netzwerke Verbindungen zu anderen Bereichen der Umweltkriminalität hätten, dem il-

92 Frank E Hagan, '„Organized crime“ and „organized crime“: Indeterminate problems of definition' (2006) 9(4) *Trends in Organized Crime* 127, 127.

93 Rob White, *Transnational environmental crime* (2013) 422.

94 Michael 't Sas-Rolfes und Timothy Fitzgerald, *Can a Legal Horn Trade Save Rhinos?*, PERC Research Paper No 13-6 (2013) 16; Campbell (n 31) 16; Bulte und Damania (n 31) 1222-1233, 1226.

95 Shelley (n 19) 90.

legalen Handel mit Seeohren, Elfenbein, Löwenknochen, Krokodilorganen und lebenden Tieren.⁹⁶ Weitere Autoren deuten zudem darauf hin, dass 'Nashorn-Syndikate' multinational tätig und an kriminellen Aktivitäten beteiligt seien, die über den Wildtierhandel hinausgingen. So seien Gruppierungen, die in den Hornhandel involviert seien, in Südafrika an Hochrisiko-Geschäften, wie Drogen- und Diamantenschmuggel, Fahrzeugdiebstahl, bewaffnete Raubüberfälle oder Bombenanschläge auf Geldautomaten, beteiligt gewesen.⁹⁷

Inwiefern ein solcher Einfluss asiatischer Syndikate auf der ersten Stufe der Nashornwilderei signifikant ist, ist meiner Ansicht nach fraglich. Studien und Reports, die eine solche Involvierung konkret nachweisen, sind wohl auch wegen der illegalen Natur einer solchen Beteiligung, schwer durchführbar. Fragmentierte Hinweise auf die Koordinierung verschiedener Wilderei-Gruppierungen von oben, die über eine blosser Rekrutierung und Ausrüsten der Wilderer hinausgeht, können jedoch festgestellt werden. Gemäss Berichten sind Wilderei-Banden keine statischen Gruppierungen und beschränken ihre Aktivitäten auf ihre eigenen 'Hinterhöfe'.⁹⁸ Die jüngsten Entwicklungen in Südafrika scheinen diese Behauptung zu bestätigen. Im Jahr 2016 nahm beispielsweise die Nashornwilderei im Krüger-Nationalpark um fast 20 % ab, stieg aber in verschiedenen Reservaten in Kwa-Zulu Natal um 38 %.⁹⁹ Gemäss dem *UNODC Wildlife Update* von 2017 deutet diese Verlagerung der Nashornwilderei weg vom Krüger Nationalpark in andere Provinzen darauf hin, dass die Nashornwilderei zumindest in Teilen von kriminellen Gruppierungen koordiniert wird. Die Verschiebung scheint dabei ein taktischer Zug seitens der Hornhändler und Wilderer als Reaktion auf die gesteigerten Wilderei-Bekämpfungsbemühungen im Krüger Nationalpark zu sein.¹⁰⁰

Zusammenfassend kann festgestellt werden, dass die Involvierung von Elementen organisierter Kriminalität, wie die sogenannten *kingpins*, zu einer gewissen 'Professionalisierung' geführt hat. Während vor einigen Jahren Nashornwilderer wegen fehlender Kontakte noch Schwierigkeiten hatten,

96 Milliken und Shaw (n 36) 76.

97 Ibid; Annette Hübschle, *Organised Crime in Southern Africa, First Annual Review* (2010) 27.

98 Rademeyer (n 86) 24.

99 [o.N.], 'Rhino poachers look to KwaZulu-Natal as Kruger net tightens', *BusinessDay* (online), 28. Februar 2017.

100 UNODC, *Wildlife Crime Status Update 2017*, Research Brief (2017) 11.

Käufer für ihr Horn zu finden¹⁰¹, sind diese Prozesse heute grösstenteils automatisiert. Einige Wilderei-Banden bestehen zwar immer noch aus unerfahrenen und schlecht ausgerüsteten Wilderern, 'professionellere Banden' haben jedoch deutlich andere Eigenschaften. Diese scheinen sich durch bessere Vorbereitung bezüglich Informationen über den Standort von Park-Patrouillen oder Tieren, Zugang zu teurerer Ausrüstung, expliziter Rollenverteilung und Verbindungen zu kriminellen Netzwerken, welche es ermöglichen, die illegale Ware schnell weiter zu transportieren, auszuzeichnen.¹⁰² Vor allem in den oberen Teilen der Beschaffungskette kann zudem die Involvierung von internationalen kriminellen Organisationen festgestellt werden.¹⁰³

VI. Conclusio

Erfolgreiche Wilderei setzt Kenntnisse über Tier und Terrain, Zugang zu Waffen und Jagderfahrung voraus.¹⁰⁴ Charakteristisches Merkmal der Nashorn-Wilderer ist in diesem Sinne die grosse Heterogenität des potentiellen Täterkreises. Nashornwilderei zeichnet sich sowohl durch die Partizipation von organisierten kriminellen Gruppierungen, als auch lokalen Wilderer aus, und kann dementsprechend nicht als ein Produkt organisierter Kriminalität bezeichnet werden. Nashornwilderei stellt vielmehr eine Möglichkeit für Akteure der organisierten Kriminalität dar, von einem bereits bestehenden scheinbar hochprofitablen Markt zu profitieren.¹⁰⁵ Akteure, die organisierten kriminellen Gruppierungen zugehörig sind, scheinen allerdings eine Rolle bei der Rekrutierung von Personen für Wilderei-Expeditionen und der Bereitstellung von Material zu spielen. Mittelsmänner werben dabei hauptsächlich Personen aus Siedlungen an, welche durch ihre Proximität zu Parks oder Reservaten mit Nashornpopulationen besonders geeignet sind.

Die Identität dieser Personen beziehungsweise ein Archetypus eines Nashorn-Wilderers kann jedoch nur schwer identifiziert werden. Wie im Kapitel über demographische Merkmale dargelegt wurde, fehlt über weite Strecken eine

¹⁰¹ Warchol (n 73) 65.

¹⁰² Lemieux (n 27) 25; Weru (n 39) 20.

¹⁰³ 't Sas-Rolfes und Fitzgerald (n 94) 16; Campbell (n 31) 16; Bulte und Damania (n 31) 1226.

¹⁰⁴ Lemieux (n 27) 23.

¹⁰⁵ White (n 93) 422.

echte wissenschaftliche Auseinandersetzung auf der Basis von qualitativen und insbesondere quantitativen Daten, die die beschriebenen vermuteten Zusammenhänge zwischen Nashornwilderei, Armut und sozialer Ungleichheit auch tatsächlich statistisch signifikant nahelegen würde. Eine flächendeckende Analyse wurde bisher dadurch erschwert, dass die benötigten soziodemographischen Daten (beispielsweise Alter, Beruf oder Herkunft) nur sehr fragmentiert in Bezug auf die in afrikanischen Nationalparks festgenommenen Wilderer dokumentiert sind. Im Bereich des illegalen Hornhandels gibt es zwar grundsätzlich einen Reichtum an Quellen, da sich Nichtregierungsorganisation, Journalisten und Naturschützer mit dem Thema vertieft auseinandersetzen. Gerade auf der Stufe der Nashornwilderei fehlt allerdings die Auseinandersetzung auf quantitativer und qualitativer das heisst wissenschaftlicher Ebene. 'Populärwissenschaftlichere' Berichte, wie sie stattdessen oft aufzufinden sind, haben für die gesellschaftliche Diskussion durchaus ihren Wert. Aussagen über die diskutierten Zusammenhänge, welche hauptsächlich auf Interviews und persönlichen Erlebnisberichten und damit anekdotischer Evidenz basieren, sollten hingegen kritisch hinterfragt werden. Für eine effektive Bekämpfung der Nashornwilderei ist der politische Diskurs auf wissenschaftliche Resultate angewiesen.

In diesem Zusammenhang ist beispielsweise die zunehmende Militarisierung von Nationalparks in Afrika als durchaus problematisch zu erachten.¹⁰⁶ Der Tod von lokalen Wilderern trägt nachweislich zur weiteren Entfremdung der lokalen Bevölkerung bei, deren Unterstützung zentral für eine wirksame Wilderei-Bekämpfung wäre.¹⁰⁷ Strategien wie 'shoot to kill'-Regelungen lassen sich einerseits unter kriminologischen Gesichtspunkten nicht rechtfertigen, da in der Forschung lediglich eine negative Korrelation zwischen der *Wahrscheinlichkeit* einer Bestrafung und dem Vorkommen von Kriminalität bezeugt wird, nicht jedoch in Bezug auf die Mass der Bestrafung. Höhere Strafen, insbesondere die Todesstrafe, haben nach herrschender Meinung schwache general- und spezialpräventive Wirkungen.¹⁰⁸ Erhoffte Profite der Nashornwilderei würden auch nach Aussagen von Rangern im Krüger Nationalpark die

¹⁰⁶ Lunstrum (n 25) 830.

¹⁰⁷ Hübschle (n 33) 208.

¹⁰⁸ Michael L Radelet und Traci L Lacock, 'Do Executions Lower Homicide Rates?: The View of Leading Criminologists' (2009) 99(2) *Journal of Criminal Law and Criminology* 489, 504; Milner- E J Gulland und N. Leader-Williams, 'A Model of Incentives for the Illegal Exploitation of Black Rhinos and Elephants: Poaching Pays in Luangwa Valley, Zambia' (1992) 29(2) *Journal of Applied Ecology* 388, 397.

drohenden Strafen immer überwiegen.¹⁰⁹ Andererseits scheint ‘*shoot to kill*’ auch im Rahmen einer menschenrechtlichen Betrachtung offensichtlich fragwürdig. Wo immer entsprechende Regelungen oder andere höchst gewaltsame Massnahmen angeordnet wurden, waren die Strafverfolgungsbehörden Berichten zufolge versucht, Leichen als Kriminelle oder Aufständische darzustellen, unabhängig davon, aus welchem Grund die Menschen wirklich erschossen wurden.¹¹⁰

Während die öffentliche Meinung über die Identität und Beweggründe von Nashornwilderen gebildet zu sein scheint, liefert eine wissenschaftliche Auseinandersetzung kein klares Resultat. Wie eingangs dargelegt, ist bereits der Tatbestand der Wilderei beziehungsweise dessen Elemente in der Literatur umstritten. Die historische Färbung des Tatbestandes im Zusammenhang mit ethnischen und sozialen Ungleichheiten zeigt anschaulich die Vielschichtigkeit des ‘Problems Nashornwilderei’.

Vor der Implementation allfälliger Gegen- oder Präventionsmassnahmen muss deshalb ein empirisches Verständnis für die ethnische, ökonomische und soziale Zusammenstellung der Zielgruppe und die Motivation hinter der Befolgung oder Nichtbefolgung von Jagdvorschriften gewonnen werden. Zudem sollte nach der hier vertretenen Meinung nach grösserer Transparenz im Bereich der Bekämpfung von Nashornwilderei gestrebt werden.

Bibliographie

- Ayling, Julie, ‘What sustains wildlife crime? Rhino Horn Trading and the Resilience of Criminal Networks’ (2013) 16(1) *Journal of International Wildlife Law & Policy* 57
- Bulte, Erwin H und Richard Damania, ‘An Economic Assessment of Wildlife Farming and Conservation’ (2005) 19(4) *Conservation Biology* 1222
- Büscher, Bram, ‘„Rhino Poaching Is out of Control!“ Violence, Race and the Politics of Hysteria in Online Conservation’ (2016) 48(5) *Environment and Planning A: Economy and Space* 979

¹⁰⁹ Nuwer (n 18) 191.

¹¹⁰ Felbab Brown (n 4) 128.

- Büscher, Bram, 'From Biopower to Ontopower? Violent Responses to Wildlife Crime and the New Geographies of Conservation' (2018) 16(2) *Conservation and Society* 157
- Campbell, Rod, *Horn of Contention: A review of literature on the economics of trade in rhino horn*, Yarmouth Port: IFAW, 2013
- Catterick, Ally, 'The Duke of Cambridge and David Beckham Unite for Wildlife', *Fauna & Flora International, News* (Webseite, 9. Juni 2014) <<https://www.fauna-flora.org/news/the-duke-of-cambridge-and-david-beckham-unite-for-wildlife>>
- Challender, Daniel W S und Douglas C MacMillan, 'Poaching Is More than an Enforcement Problem' (2014) 7(5) *Conservation Letters* 484
- Cheung, Julie, 'Implementation and Enforcement of CITES: An Assessment of Tiger and Rhinoceros Conservation Policy in Asia (1995) 5(1) *Washington International Law Journal* 125
- Crosta, Andrea, Kimberly Sutherland und Chiara Talerico, *Grinding Rhino, Operation Red Cloud, An Undercover Investigation on Rhino Horn Trafficking in China and Vietnam*, EAL Investigative Report, Los Angeles, CA: Elephant Action League (EAL), Juli 2017
- Daffue, Hendrik und Elise Daffue, *Behind the trigger: the many faces of rhino poaching*, Pretoria: Stop Rhino Poaching, 2016
- Duffy, Rosaleen und Freya A V St John, *Poverty, Poaching and Trafficking: What Are the Links?*, London: Evidence on Demand, June 2013
- Duffy, Rosaleen, *Nature Crime: How we are getting conservation wrong* New Haven, CT: Yale University Press, 2010
- Eloff, Corné, 'Rhino poaching in South Africa – is it a losing battle' (2012) Jan/Feb *PositionIT* 57
- Emslie, Richard H et al, *African and Asian Rhinoceroses – Status, Conservation, and Trade*, a report from the IUCN Species Survival Commission (IUCN SSC) African and Asian Rhino Specialist Groups and TRAFFIC to the CITES Secretariat pursuant to Resolution Conf. 9.12 (Rev. Cop15), CITES CoP17 Coc 68 Annex 5 (Juli 2016)
- Felbab Brown, Vanda, *The Extinction Market, Wildlife Trafficking and how to counter it*, London: Hurst and Company, 2018
- Glenny, Misha, 'The strange figures behind a secret trade', *BBC News* (Webseite, undatiert) <https://www.bbc.co.uk/news/resources/idt-sh/rhino_poaching>
- Gosling, Melanie, 'Khaki-Collar-Crime a growing evil', *IOL* (Webseite, 14. Dezember 2011) <<https://www.iol.co.za/news/khaki-collar-crime-a-growing-evil-1198716>>

- Greer Fenio, Kenly, *Poaching Rhino Horn in South Africa and Mozambique: Community and Expert Views from the Trenches*, [s.l.]: Conservation Action Trust, 2014
- Haas, Timothy C und Sam M Ferreira, 'Combating Rhino Horn Trafficking: The Need to Disrupt Criminal Networks' (2016) 11(11) *PLoS ONE* [s.p.], 2
- Hagan, Frank E, '„Organized crime“ and „organized crime“: Indeterminate problems of definition' (2006) 9(4) *Trends in Organized Crime* 127
- Hirschi, Travis, 'Procedural Rules and the Study of Deviant Behavior' (1973) 21(2) *Social Problems* 159
- Hübschle, Annette M, 'The social economy of rhino poaching: of economic freedom fighters, professional hunters, and marginalized local people' (2017) 65(3) *Current Sociology* 427
- Hübschle, Annette M, *A Game of Horns: Transnational Flows of Rhino*, Dissertation, Universität Köln (2016)
- Hübschle, Annette, 'Security Coordination in an Illegal Market: The Transnational Trade in Rhinoceros Horn' (2016) 43(2) *Politikon* 193
- Hübschle, Annette, *Organised Crime in Southern Africa, First Annual Review*, Pretoria: Institute for Security Studies, 2010
- IUCN, 'IUCN Reports Deepening Rhino Poaching Crisis in Africa' (Webseite, 9. März 2016) <<http://www.iucn.org/content/iucn-reports-deepening-rhino-poaching-crisis-africa>>
- Kahler, Jessica S und Meredith L Gore, 'Beyond the Cooking Pot and Pocket Book: Factors Influencing Noncompliance with Wildlife Poaching Rules' (2012) 36(2) *International Journal of Comparative and Applied Criminal Justice* 103
- Knapp, Eli J, Nathan Peace und Lauren Bechtel, 'Poachers and Poverty: Assessing Objective and Subjective Measures of Poverty among Illegal Hunters Outside Ruaha National Park, Tanzania' (2017) 15(1) *Conservation and Society* 24
- Lemieux, Andrew M, *Situational Prevention of Poaching* London, London: Routledge, 2014
- Lunstrum, Elizabeth, 'Green Militarization: Anti-Poaching Efforts and the Spatial Contours of Kruger National Park' (2014) 104(4) *Annals of the Association of American Geographers* 816
- Merton, Robert K, 'Social Structure and Anomie' (1938) 3(5) *American Sociological Review* 672

- Milliken, Tom und Jo Shaw, *The South Africa-Viet Nam Rhino Horn Trade Nexus: A Deadly Combination of Institutional Lapses, Corrupt Wildlife Industry Professionals, and Asian Crime Syndicates*, TRAFFIC REPORT, Johannesburg: TRAFFIC, 2012
- Milliken, Tom, *Illegal Trade in Ivory and Rhino Horn: An Assessment to Improve Law Enforcement under the Wildlife TRAPS Project*, TRAFFIC Report, Cambridge: TRAFFIC and USAid, 2014
- Milner-Gulland, E J und N Leader-Williams, 'A Model of Incentives for the Illegal Exploitation of Black Rhinos and Elephants: Poaching Pays in Luangwa Valley, Zambia' (1992) 29(2) *Journal of Applied Ecology* 388
- Moneron, Sade, Nicola Okes und Julian Rademeyer, *Pendants, Powder and Pathways, A rapid assessment of smuggling routes and techniques used in the illicit trade in African rhino horn*, TRAFFIC REPORT, Pretoria: TRAFFIC, September 2017
- Nuwer, Rachel Love, *Poached, Inside the dark world of wildlife trafficking*. London: Scribe, 2018
- Orenstein, Ronald, *Ivory, Horn and Blood: Behind the Elephant and Rhinoceros Poaching Crisis*, Richmond Hill, Ont: Firefly, 2013
- Poudyal, Mahesh, Kristina Rothley und Duncan Knowler, 'Ecological and Economic Analysis of Poaching of the Greater One-Horned Rhinoceros (*Rhinoceros Unicornis*) in Nepal' (2009) 19(7) *Ecological Applications* 1693
- Radelet, Michael L und Traci L Lacock, 'Do Executions Lower Homicide Rates?: The View of Leading Criminologists' (2009) 99(2) *Journal of Criminal Law and Criminology* 489
- Rademeyer, Julian, *Tipping Point: Transnational organised crime and the 'war' on poaching*, Part 1 of a 2-part investigation into rhino horn trafficking in Southern Africa, Geneva: Global Initiative against Transnational Organized Crime, Juli 2016
- Secretariat of the Convention on Biological Diversity et al, *Biodiversity and the 2030 Agenda for Sustainable Development: Technical Note*, Montreal: Secretariat of the Convention on Biological Diversity, 2011
- Shelley, Louise, *Dark Commerce: How a new illicit economy is threatening our future*. Princeton, NJ: Princeton and Oxford University Press, 2018
- Shogren, Jason und John Tschirhart, *Protecting endangered species in the United States: biological needs, political realities, economic choices*, Cambridge: Cambridge University Press, 2001
- Smith, David, 'Thousand of rhinos, 500 poachers; grim toll in the hunt for prized horns', *The Guardian* (online), 18 October 2015 <<https://www.theguardian.com/environment/2015/oct/18/rhino-horn-boom-impoverished-african-poachers>>

- 't Sas-Rolfes, Michael und Timothy Fitzgerald, *Can a Legal Horn Trade Save Rhinos?*, PERC Research Paper No 13 – 6 (2013)
- United for Wildlife, 'United for Wildlife: home' (Webseite, undatiert) <<http://www.unitedforwildlife.org>>
- UNODC, *Wildlife Crime Status Update*, Research Brief, Vienna: UNODC, 2017
- von Essen, Erica et al, 'Deconstructing the poaching phenomenon: A review of typologies for understanding illegal hunting' (2014) 54(4) *British Journal of Criminology* 632
- Warchol, Greg L, 'The Transnational Illegal Wildlife Trade' (2004) 17(1) *Criminal Justice Studies* 57
- Weru, Sam, *Wildlife protection and trafficking assessment in Kenya: Drivers and trends of transnational wildlife crime in Kenya and its role as a transit point for trafficked species in East Africa*, TRAFFIC Report, Cambridge: TRAFFIC, May 2016
- White, Rob, *Transnational environmental crime*, Farnham: Ashgate, 2013
- Wright, Glen William, 'Conceptualising and combating transnational environmental crime' (2011) 14 *Trends in Organized Crime* 332
- WWF, 'The Duke of Cambridge and David Beckham launch #whosideareyouon campaign', *WWF Updates* (Webseite, 9. Juli 2014) <<https://www.wwf.org.uk/updates/duke-cambridge-and-david-beckham-launch-whosideareyouon-campaign>>
- Wyatt, Tanya, *Wildlife Trafficking, a Deconstruction of the Crime, the Victims and the Offenders*, Houndmills: Palgrave Macmillan, 2013
- [o.N.], 'Rhino poachers look to KwaZulu-Natal as Kruger net tightens', *BusinessDay* (online), 28. Februar 2017 <<https://www.businesslive.co.za/bd/national/science-and-environment/2017-02-28-rhino-poachers-look-to-kwazulu-natal-as-kruger-net-tightens/>>

Chapter Three

Korruption und der illegale Handel mit Wildtieren

HANNAH-SOPHIA FEUERSTEIN

Dieses Kapitel untersucht wie Korruption den illegalen Wildtierhandel erleichtert. Das Kapitel gibt einen Überblick über die Zusammenhänge zwischen Korruption und Schmuggel von Wildtieren und zeigt die Probleme auf, die damit einhergehen. Abschließend werden Gegenmaßnahmen zur Reduktion von wildtierbezogener Korruption behandelt und auf ihre Wirksamkeit und Anwendbarkeit geprüft.

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I. Einleitung

Dieses Kapitel befasst sich mit Korruption im Zusammenhang mit illegalem Wildtierhandel. Dieser Zusammenhang ist von aktueller Bedeutung und hat vielfältige negative Auswirkungen auf Gesellschaft, Wirtschaft und, vor allem, Umwelt und Artenschutz. Korruption im Wildtierbereich stellt ein ernstes globales Problem dar, das die Bemühungen und Anstrengungen von Regierungen, internationalen Organisationen und der Gesellschaft im Bereich des Tierschutzes und der Regulierung und Kontrolle des Tierhandels schmälert und untergräbt. Es verschärft die Bedrohung der Artenvielfalt und beschleunigt das Aussterben von bedrohten und gefährdeten Tierarten.

Die Ziele dieses Kapitels sind einerseits ein tieferes Verständnis der Problematik zu vermitteln und andererseits einen Leitfaden für Korruption in Bezug auf den weltweiten Schmuggel von Wildtieren zu erstellen. Teil II erklärt die Begriffe 'Korruption' und 'illegaler Wildtierhandel' und zeigt Synergien zwischen diesen Bereichen kurz auf. Anschließend werden die Auswirkungen, Folgen und Konsequenzen davon untersucht. Anhand von Fallbeispielen werden in Teil IV die Stationen, Akteure und Methoden von Korruption im Wildtierbereich näher erläutert. Teil V untersucht die potenziellen Ursachen für Korruption im Zusammenhang mit illegalem Wildtierhandel und versucht herauszufinden, ob sich allgemeine Muster und Abläufe erkennen lassen. Auf dieser Grundlage werden in Teil VI die Stärken und Schwächen bereits existierender Maßnahmen und Strategien zur Bekämpfung von wildtierbezogener

Korruption geprüft. Die Conclusio (Teil VII) widmet sich der Entwicklung neuer Vorschläge und Empfehlungen.

Die Literatur, die sich speziell mit dem Verhältnis zwischen Korruption und illegalem Wildtierhandel befasst, ist überschaubar. Der Großteil der Quellen, insbesondere Berichte und Forschungsarbeiten, die den Schmuggel von Wildtieren behandeln, stellen lediglich fest, dass Korruption Wilderei, Schmuggel und Schwarzhandel von Wildtieren ermöglicht und fördert ohne dazu nähere Angaben zu machen. Die meisten Quellen analysieren weder die Risiken oder Ursachen für Korruption, noch potenzielle Anti-Korruptionsmaßnahmen. Separat betrachtet, ist zu den Themen Schmuggel von Wildtieren und Korruption viel Literatur verfügbar, jedoch gehen äußerst wenige Veröffentlichungen auf die Schnittstelle zwischen diesen Themen ein. Statistiken zu diesen Themen, soweit sie überhaupt verfügbar sind, müssen ebenfalls mit Vorsicht betrachtet werden, da Fälle nur selten berichtet und zur Anzeige gebracht werden und Strafverfahren in diesem Bereich die Ausnahme sind. Aus diesen Gründen ist von einer hohen Dunkelziffer auszugehen.

II. Kontext, Konzept und Begrifflichkeiten

Korruption besteht allgemein aus zwei Kernelementen. Zum einen beinhaltet Korruption den Missbrauch von Macht, die im Rahmen einer Staatsinstitution oder privaten Organisation anvertraut oder übertragen wurde. Zum anderen beinhaltet Korruption private Vorteile, Nutzen oder Begünstigungen.¹ Beide Seiten, die in die Handlung involviert sind, profitieren davon, entweder in Form von Geld oder anderen Vorteilen. Korruption kann somit als Missbrauch einer anvertrauten Machtposition zum Zwecke persönlicher Bereicherung unter Missachtung moralischer Standards, Amtspflichten oder Gesetze, verstanden werden. Es handelt sich demnach um einen vorteilhaften, aber pflichtwidrigen Leistungsaustausch. Es ist in der Regel schwierig festzustellen, ab wann ein Geschäft pflichtwidrig ist. Grundsätzlich gelten nur jene Ge-

¹ WWF und TRAFFIC, *Strategies for Fighting Corruption in Wildlife Conservation: A Primer* (2015) 2, 3; Transparency International, 'What is Corruption?' (Webseite, 2020); U4 Anti-Corruption Resource Centre, 'What is corruption?' (Webseite, undatiert); Louisa Musing et al, *Corruption and Wildlife Crime. A Focus on Caviar Trade* (Februar 2019) 6–13; Transparency International – Austrian Chapter, 'Definition von Korruption' (Webseite, undatiert).

schäfte als pflichtgemäß, die auf Unparteilichkeit und auf sachlichen Merkmalen basieren.²

Dieses Kapitel verwendet die Begriffe ‘Schmuggel von Wildtieren’ synonym zu ‘illegalem Wildtierhandel’. Unter illegalem Handel mit Wildtieren versteht man jegliche wildtierbezogene illegalen Aktivitäten. Diese beinhalten den illegalen Handel, Schmuggel, die Wilderei, das Fangen oder Sammeln von bedrohten Spezies und geschützten Wildtieren, einschließlich von Tieren, die Gegenstand von Jagdquoten und regulierten Konzessionen sind, oder Produkte davon.³ Der illegale Wildtierhandel trägt wesentlich zum Aussterben bedrohter Spezies bei. Der Schmuggel von Wildtieren beinhaltet verschiedene, oft einander überschneidende Delikte und Verstöße, wie Dokumentenbetrug und -fälschung (zum Beispiel gefälschte Jagdlizenzen oder Export-Konzessionen), Geldwäscherei, Steuerhinterziehung und Korruption.⁴

Illegaler Handel mit Wildtieren tritt häufig dort auf, wo es wenige wirtschaftliche Möglichkeiten gibt, staatliche Durchsetzung schwach und Korruption weitverbreitet ist. Korruption führt im Kontext von illegalem Wildtierhandel zur Schwächung und Umgehung von Gesetzen und anderen Maßnahmen, die Wildtiere schützen und den Wildtierhandel regulieren sollen. Vielfach hat Korruption auch mangelhafte strafrechtliche Verfolgung von Tätern zur Folge.⁵

III. Folgen

Korruption in Verbindung mit illegalem Wildtierhandel kann ernste Konsequenzen nach sich ziehen:⁶ Es kann die Biodiversität und Ökosysteme schädigen, indem es die Wasserversorgung, Lebensmittelproduktion und

2 Transparency International – Austrian Chapter, *Das ABC der Antikorruption* (2. Aufl., 2016) 82.

3 Dalberg, *Fighting illicit wildlife trafficking: A consultation with governments* (2012) 9.

4 Maira Martini, *Wildlife crime and corruption*, U4 Expert Answer (15. Februar 2013) 2.

5 WWF und TRAFFIC (n 1) 4.

6 Nigel Leader-Williams, Robert J. Smith und Rolf D. Balduns, ‘The Influence of Corruption on the Conduct of Recreational Hunting’ in in Barney Dickson, Jon Hutton und William M. Adams (Hrsg.), *Recreational Hunting, Conservation and Rural Livelihoods: Science and Practice* (2009) 296, 301, 306 – 307; Musing et al (n 1) 1.

menschliche Lebensräume einschränkt und das Aussterben von Wildtieren verursacht. Wildtierbezogene Korruption kann den Verlust von Steuereinnahmen und Ressourcen bewirken, weil es Staaten um ihre Einnahmen aus dem Verkauf von Jagdlizenzen und von Konzessionen für den Export und Import von Wildtierprodukten bringt und verhindert, dass sie ihre natürlichen Ressourcen zu ihren eigenen Gunsten nutzen können. Vor allem die ländliche Bevölkerung ist häufig von den natürlichen Ressourcen, insbesondere von Wildtieren, abhängig, weil diese ihr Überleben sichern. Dennoch wird sie häufig von der Diskussion um Korruption und Wildtierschmuggel ausgeschlossen, weil die Auswirkungen und Folgen auf ihre Lebensgrundlagen, insbesondere Verarmung, nicht berücksichtigt werden. Finanziell schlechter gestellte Menschen trifft Korruption in Verbindung mit Wildtierschmuggel oft unverhältnismäßig hart. Sie sind häufig nicht in der Lage, hohe Bestechungssummen aufzubringen. Als Resultat von Korruption und Wildtierschmuggel kann es auch zu Verletzungen der Menschenrechte kommen, zum Beispiel kann das Recht auf Zugang zu einem Gericht beziehungsweise das Recht auf ein faires Verfahren (zum Beispiel Artikel 6(1) der *Europäischen Menschenrechtskonvention* (EMRK)⁷), wenn eine Sache nur angehört oder verhandelt wird, falls die Parteien das Gerichtspersonal oder die Richter bestechen.

IV. Stationen, Akteure und Methoden

1. Stationen und Abschnitte

Der illegale Handel mit Wildtieren ist ein mehrstufiges, facettenreiches Delikt, das mit dem Einfangen und unerlaubten Jagen von Wildtieren beginnt. Anschliessend werden die Wildtiere durch Schmuggeln oder betrügerische Handlungen zum Verkaufsort transportiert. Dies geschieht häufig durch das Umgehen von Kontrollpunkten und Grenzübergängen sowie durch Verstöße gegen Lizenzen, Zertifikate und Konzessionen.⁸ Abhängig von der jeweiligen Tierart und davon, ob das Tier lebendig ist oder nicht, werden unterschied-

7 Eröffnet zur Unterzeichnung 4. November 1950, ETS Nr. 005 (in Kraft getreten 3. September 1953).

8 WWF und TRAFFIC (n 1) 4, 5.

liche Transportformen angewendet. Die weiteren Stationen und beteiligten Personen variieren je nach Einzelfall. Daraus entsteht ein komplexes und verflochtenes System.⁹

Korruption kann dabei in unterschiedlichem Umfang involviert sein. Bereits das anfängliche Erlegen oder Einfangen eines geschützten Tieres kann durch eine lediglich gegen Bestechungsgeld herausgegebene, falsche Konzession zurückgehen. Aber auch die Verfolgung und Aufklärung entsprechender Delikte sind stark korruptionsanfällig. So finden sich oft korrupte Aktivitäten der Polizei, von Rangern, Justiz- und Regierungsbeamten, die unangemessenen Einfluss auf Ermittlung und Strafverfolgung ausüben können. Dadurch wird die Immunität von Tierhändlern vor Strafverfolgung und Verhaftung gewährleistet.

2. Akteure

Wildtierbezogene Korruption kann sich durch alle gesellschaftlichen Schichten und Milieus ziehen; sie ist nicht auf bestimmte wirtschaftliche oder soziale Bereiche, Geschäftszweige oder Regierungsebenen beschränkt. Es handelt sich daher um ein weitverbreitetes Problem, das in unterschiedlichem Ausmaß und Umfang und in verschiedenen Formen in allen Staaten weltweit existiert. Akteure können aktiv oder passiv an Korruption teilnehmen, je nach dem, ob eine Person eine andere besticht oder selbst bestochen wird.¹⁰

1.1. Petty and grand corruption – Klein- und Großkorruption

Unter '*grand corruption*', die auch als '*high-level corruption*', Großkorruption oder politische Korruption bezeichnet wird, ist jene Korruption zu verstehen, die sich an der Schnittstelle der politischen Entscheidungsfindung und des Gesetzgebungsprozesses ereignet oder diese unmittelbar und in missbräuchlicher Weise beeinflusst.¹¹ Bei den Personen, die an dieser Korruptionsform beteiligt sind, handelt es sich größtenteils um politisch exponierte Personen. Charakteristisch für diese Akteure ist, dass sie entweder eine

⁹ Martini (n 4) 3.

¹⁰ Tanya Wyatt und Anh Ngoc Cao, *Corruption and wildlife trafficking*, U4 Issue No 11 (Mai 2015) 20 – 21, 31; UNODC, *Wildlife and Forest Crime: Analytic toolkit* (2012) 144, 145, 146.

¹¹ Transparency International – Austrian Chapter (n 2) 51.

bedeutende öffentliche Funktion ausüben beziehungsweise Politik und Gesetze machen oder, dass sie leitende Entscheidungen innerhalb privater Unternehmen und Konzerne treffen. Beispiele dafür sind Minister, hochrangige Regierungsbeamte sowie deren enge Familienangehörige und Personen, die ihnen nahestehen wie etwa Geschäftspartner, Manager und Vorstandsvorsitzende.¹² Diese Individuen haben dadurch die Möglichkeit, sich selbst oder ihre Freunde und Familien zu begünstigen. Als Folge davon kommt es zur Schwächung von politischen und wirtschaftlichen Systemen und Rechtsordnungen sowie zur Unterwanderung demokratischer Werte.¹³

Grand corruption ist vor allem deshalb besonders schädigend, weil es dabei um bedeutsame Entscheidungen und große Geldsummen geht und weil sie Korruption auf niedrigeren Ebenen, die sogenannte *petty corruption*, ermöglicht oder zumindest fördert.¹⁴

Petty corruption wird auch administrative, bürokratische Korruption oder Kleinkorruption genannt. Sie bezieht sich auf Machtmissbrauch in alltäglichen Situationen, der vor allem an der Schnittstelle zwischen öffentlichen Institutionen und Bürgern auftritt.¹⁵ *Petty corruption* erfolgt oft in direktem Zusammenhang mit der Umsetzung und Durchführung von bestehenden Gesetzen, Regeln und Vorschriften, zum Beispiel wenn öffentliche Angestellte oder Beamte Urkunden oder Dokumente nur ausstellen, wenn sie als Gegenleistung dafür Zahlungen, die höher als der ausgeschriebene, offizielle Preis für diese Dienstleistung sind, erhalten oder um bürokratische Prozesse zu ermöglichen oder zu beschleunigen.¹⁶ Für gewöhnlich wechseln dabei vergleichsweise geringe Beträge den Besitzer, die aber für die beteiligten Akteure alles andere als unbedeutend sind.¹⁷

Ist *petty corruption* vorherrschend und weit verbreitet, kann sie auch größere Ausmaße annehmen. In dieser Konstellation kann sich *petty corruption* ähnlich wie *grand corruption* auswirken, das heisst das ordnungsgemäße Funktionieren eines Staats beziehungsweise des jeweiligen Regierungssystems beeinträchtigen. Oft ist daher nicht klar, wo *petty corruption* endet und *grand*

¹² Ibid 52.

¹³ Musing et al (n 1) 6.

¹⁴ UNODC (n 14) 54.

¹⁵ Musing et al (n 1) 6; Transparency International – Austrian Chapter (n 2) 64.

¹⁶ Musing et al (n 1) 6.

¹⁷ Ibid.

corruption beginnt, die Grenzen sind fließend, so kann politische Korruption auch Formen von *petty corruption* umfassen. Beamte, die illegale Zahlungen von Bürgern einfordern sind teilweise dazu gezwungen, weil ihre Vorgesetzten einen Anteil des Einkommens ihrer Untergebenen als Gegenleistung für deren Anstellung verlangen. Diese Vorgesetzten können wiederum Vorgesetzte haben, die, ihrerseits abermals Geld von jenen erwarten. Diese Korruptionskette kann sich bis zu den obersten, höchsten Staatsbeamten durchziehen.¹⁸

1.2. Privater und öffentlicher Sektor

Korruption in Zusammenhang mit Schmuggel von Wildtieren findet sowohl im öffentlichen als auch im privaten Sektor statt. Akteure, die illegalen Wildtierhandel betreiben, sind in den unterschiedlichsten Berufsfeldern tätig. Die potenziellen Akteure reichen von Individuen, Unternehmen bis hin zu Organisationen und politischen Parteien. Ein Beispiel für den privaten Bereich ist, dass Büroangestellte oder Schaltermitarbeiter, die zuständig für Luftfracht oder Güterabfertigung und -annahme sind, Geld akzeptieren, um wissentlich diverse Dokumente wie Frachtpapiere und Ausfuhrgenehmigungen von Wildtieren und Wildtierprodukten zu fälschen. Öffentliche Korruption umfasst politische Prozesse und staatliche Stellen wie zum Beispiel Strafverfolgungsbehörden. Als solche versteht man in diesem Kontext Polizei, Zollverwaltung, Steuerfahndung, Staatsanwaltschaft und Finanzverwaltung. Inhaltlich geht es dabei u. a. um die Verteilung von Fördergeldern, Zuschüssen, öffentlichen Geldern und Bewilligungen.

3. Methoden

Viele bestehende Straf- und Verwaltungsgesetze weltweit verbieten nur ausgewählte oder einzelne Typen, Formen oder Methoden von korrupten Taten und Akten. Viele Handlungen gelten aber auch dann als korrupt, wenn sie nicht gesetz- oder rechtswidrig sind, das heisst nicht alle korrupten Taten sind illegal. Korruption kann aufgrund ihrer komplexen Struktur im Laufe der Zeit

¹⁸ WWF und TRAFFIC (n 1) 3; U4 Anti-Corruption Resource Centre (n 1).

zu neuen Formen avancieren, die das Straf- und Verwaltungsrecht nicht kennt, weil sie nicht in den Gesetzestexten verankert sind.¹⁹

Ausgehend vom Übereinkommen handelt es sich bei den folgenden Deliktsbereichen um die geläufigsten Methoden von Korruption, für die es zwar keine allgemeingültigen oder exakt übereinstimmende Definitionen gibt, die aber in den meisten Rechtsordnungen unter Strafe gestellt sind:

3.1. Bestechung und Vorteilszuwendung

Bestechung betrifft das Anbieten, Versprechen oder die Zuwendung von Vorteilen an Amtsträger oder Angestellte und Bedienstete der Privatwirtschaft für pflichtwidrige Geschäfte. Konkret bedeutet dies, dass eine Person in einer anvertrauten Machtposition einen unzulässigen Vorteil akzeptiert oder einen solchen fordert, um eine Funktion auszuüben oder sich auf eine bestimmte gesetz- oder rechtswidrige Art und Weise zu verhalten.²⁰ Vorteile für pflichtgemäße Geschäfte fallen hingegen unter den Straftatbestand Vorteilszuwendung beziehungsweise -annahme.²¹ Unter einem Vorteil werden sowohl Vermögenswerte also auch immaterielle Zuwendungen verstanden. Wesentlich ist, dass er den Empfänger besser stellt als davor.

Laut einer Studie von 2018 werden zum Beispiel täglich Bestechungsgelder in Höhe von USD 18 000 bis 30 000 an Grenzschutzbeamte entlang der Grenze zwischen Vietnam und China bezahlt, um den reibungslosen Transport und Schmuggel von illegalem Elfenbein zu ermöglichen.²² Auch Grenzbeamte in Polen werden häufig bestochen, um illegalen Kaviar aus der Russischen Föderation in die Europäische Union (EU) schmuggeln zu können.²³ Abgesehen davon gibt es auch zahlreiche Versuche, die strafrechtliche Verfolgung von mutmaßlichen Wilderern zu verhindern, wie etwa Bestechungsgelder, die an Beamte bezahlt werden, damit sie Gerichtsakten absichtlich zerstören oder verlieren. 2016 wurden zum Beispiel einem Staatsanwalt in Gabun USD 4 000

¹⁹ Martini (n 4) 4.

²⁰ Musing et al (n 1) 6.

²¹ Transparency International – Austrian Chapter (n 2) 105–106.

²² WWF, TRAFFIC und U4 Anti-Corruption Resource Centre, *Wildlife crime and corruption: options for moving forward* (2018) 4.

²³ Ibid.

angeboten, damit er einen ausländischen Wilderer freilässt. Der Staatsanwalt leitete daraufhin aber ein Korruptionsverfahren ein.²⁴

3.2. Verbotene Intervention, missbräuchliche und ungebührliche Einflussnahme

Verbotene Intervention bedeutet, dass jemand für sich oder Dritte einen Vorteil verlangt, sich versprechen lässt oder annimmt, damit er einen unangemessenen und ungebührlichen Einfluss auf den Entscheidungsfindungsprozess im öffentlichen oder privaten Bereich ausübt. Der Nutznießer der Intervention muss nicht unbedingt direkt Einfluss auf die jeweilige Person nehmen, um sich strafbar zu machen; auch die Vermittlung durch eine dritte Person ist verboten.²⁵

3.3. Urkundenfälschung

Bei der Urkundenfälschung handelt es sich um das Herstellen einer unechten Urkunde, die Verfälschung eines echten Dokuments oder den Gebrauch einer gefälschten Urkunde zum Zweck der Täuschung im Rechtsverkehr. Urkundenfälschung im Zusammenhang mit Korruption liegt vor, wenn die Fälschung oder Verwendung der Fälschung nur im Gegenzug für eine Vorteils-gewährung geleistet wird.²⁶

Im Gegenzug für Bestechungsgelder deklarierte zum Beispiel der damalige Leiter der Verwaltungsbehörde des *Washingtoner Artenschutzübereinkommens*²⁷ in Guinea Menschenaffen als in Gefangenschaft gezüchtet und erteilte für diese Ausfuhrgenehmigungen. 2015 wurde er dafür zu 18 Monaten Haft verurteilt. Im Jänner 2017, während er auf das Urteil seiner Berufung wartete, kam es allerdings zu einer Begnadigung durch Guineas Staatsoberhaupt.²⁸

²⁴ Ibid.

²⁵ Transparency International – Austrian Chapter (n 2) 103.

²⁶ Wyatt und Ngoc Cao (n 10) 25 – 26.

²⁷ *Übereinkommen über den internationalen Handel mit gefährdeten Arten freilebender Tiere und Pflanzen (Convention on International Trade in Endangered Species of wild Fauna and Flora (CITES))*, eröffnet zur Unterzeichnung 3. März 1973, 994 UNTS 243 (in Kraft getreten 1. Juli 1975).

²⁸ WWF, TRAFFIC und U4 Anti-Corruption Resource Centre (n 22) 4.

3.4. Diplomatische Immunität

‘*Diplomatic cover*’ meint den besonderen Schutz von Diplomaten, der Raum für korrupte Zwecke bietet. Dazu zählen umfangreiche Vorrechte, Befreiungen, Privilegien und Immunitäten, wie etwa die Unverletzlichkeit der Privatwohnung des Diplomaten und seiner Person, Zollbefreiungen und Kontrollen des persönlichen Reisegepäckes sowie Flugsicherheitskontrollen.²⁹

Beispielsweise zeigen von der Environmental Investigation Agency (EIA) aufgenommene Videobeweise, Angestellte der Vietnamesischen Botschaft in Südafrika, die den Nashornhandel direkt vor der vietnamesischen Botschaft in Pretoria abwickeln.³⁰

3.5. Veruntreuung

Von Veruntreuung spricht man, wenn jemand sich oder einem Dritten eine anvertraute Sache mit Bereicherungsvorsatz zueignet. Im Wildtierbereich wird vorwiegend zugunsten Dritter für eine Gegenleistung veruntreut,³¹ so etwa von bewaffneten Polizeibeamten nahe des Selous Wildtier-Schutzgebiets in Tansania Elfenbein-Wilderer.³² Ein Beispiel für die Veruntreuung von Ressourcen zur Erhaltung und zum Schutz der Tierwelt sind korrupte Praktiken wie Beschaffungs- oder Submissionsbetrug und Diebstahl von Einnahmen aus Nationalparks, die die Arbeit im Bereich des Wildtierschutzes erschweren.³³

3.6. Vetternwirtschaft und Nepotismus

Vetternwirtschaft und Nepotismus können synonym verwendet werden und bezeichnen die Begünstigung von Verwandten. Sie führen dazu, dass Famili-

29 Andrew M. Lemieux und Ronald V. Clarke, ‘The International Ban on Ivory Sales and its Effect on Elephant Poaching in Africa’ (2009) 49 *British Journal of Criminology* 451, 458; Wyatt und Ngoc Cao (n 10) 10.

30 EIA, *Vietnam’s Illegal Rhino Horn Trade: Undermining the Effectiveness of CITES* (Februar 2013) 6.

31 Transparency International – Austrian Chapter (n 2) 104.

32 WWF, TRAFFIC und U4 Anti-Corruption Resource Centre (n 22) 4; Leader-Williams, Smith und Baldus (n 6) 301, 306 – 307.

33 WWF, TRAFFIC und U4 Anti-Corruption Resource Centre (n 22) 4.

enmitglieder oder Verwandte Arbeitsstellen, Aufträge oder andere Vorteile ohne Beachtung der fachlichen Qualifikation oder Eignung erhalten. Liegt kein Verwandtschaftsgrad vor, spricht man von Günstlings- oder Freunderlwirtschaft.³⁴

Bei sogenannter 'Freunderlwirtschaft' handelt es sich um die ungerechtfertigte Bevorzugung einer oder mehrerer Personen zu Lasten anderer. Zu den Nutznießern zählen im Gegensatz zur Vetternwirtschaft nicht notwendigerweise Familie oder Verwandte. Werden beispielsweise Angestellte im Wildtierbereich nur befördert, weil sie mit ihrem Vorgesetzten privat eng befreundet sind, liegt Freunderlwirtschaft vor.³⁵

3.7. Erpressung und Nötigung

Im Kontext von wildtierbezogener Korruption bezeichnet Erpressung den Missbrauch einer anvertrauten Machtposition, zum Beispiel von RangerInnen oder PolizistInnen, um durch Zwang oder Androhung von Gewalt, sich selbst oder Dritte gesetzwidrig und zu Lasten eines anderen vorsätzlich zu bereichern. Nötigung benötigt im Gegensatz zur Erpressung keine Bereicherungsabsicht und keine Vermögensschädigung, zielt aber wiederum auf eine Handlung, Duldung oder Unterlassung eines Mitarbeiters im Wildtierbereich ab, die im Endeffekt zum Nachteil von Wildtieren endet.³⁶

3.8. Ermessensmissbrauch

Das Legalitätsprinzip besagt, dass das gesamte staatliche Handeln auf Gesetzen beruhen muss. Es wird durch gesetzlich erlaubte Ermessensentscheidungen von Verwaltungsbehörden durchbrochen. Ein Ermessensmissbrauch oder -fehler liegt vor, wenn die Entscheidung einer Verwaltungsbehörde nicht vom ihr zugestandenen Ermessensspielraum gedeckt wird, zum Beispiel wenn eine CITES-Behörde willkürliche, nicht nachvollziehbare Ein-, Aus-, oder Wiederausfuhrgenehmigungen und Bescheinigungen erteilt.³⁷

³⁴ Transparency International – Austrian Chapter (n 2) 74.

³⁵ Transparency International – Austrian Chapter (n 2) 54.

³⁶ Ibid 41; Musing et al (n 1) 6.

³⁷ Transparency International – Austrian Chapter (n 2) 40.

3.9. Geldwäsche

Geldwäsche bezeichnet das Verbergen oder Verschleiern des kriminellen oder rechtswidrigen Ursprungs von Geldern. Bei Geldwäsche geht es um das Einschleusen von illegal erwirtschaftetem Vermögen in den legalen Wirtschaftskreislauf. Erträge aus Korruptionsdelikten, wie Bestechungsgelder oder Kick-back-Zahlungen, sollen auf diese Weise umdeklariert werden. Sie sind vor allem in Staaten mit Bankgeheimnis schwer aufzuspüren.³⁸

V. Ursachen

Korruption im Wildtierbereich entsteht dort, wo institutionelle Machtkontrolle mangelhaft, die Entscheidungsfindung undurchsichtig, Armut weit verbreitet und die Zivilgesellschaft nicht fähig ist, diese zu erkennen oder keine Möglichkeit hat, diese anzuzeigen.³⁹

Das Fehlen von Maßnahmen oder ungenügende Kontrollen und unzulängliche Überwachung im Wildtierbereich ermöglichen es, korrupte Aktivitäten auf jedem Level zu verbergen und reduzieren die Wahrscheinlichkeit, dass ihre Täter entdeckt werden. Schwache interne Kontrollen sowie kontrollierte und zensierte Medien sind weitere erleichternde Bedingungen für wildtierbezogene Korruption.⁴⁰ Eng mit dem geringen Entdeckungsrisiko verbunden ist der geringe Abschreckungseffekt. Die unwirksamen Kontrollen im Wildtierbereich führen zu mangelnder Strafverfolgung, indem sie selten entdeckt oder gar angezeigt werden.⁴¹ Dies liegt auch daran, dass wildtierbezogene Korruptionsbestimmungen und Vorschriften häufig zu komplex, mehrdeutig und widersprüchlich formuliert oder schwierig und teuer umzusetzen sind. Unter solchen Umständen werden Antikorruptionsgesetze oft ignoriert oder nur sporadisch durchgesetzt und vollzogen.⁴²

³⁸ Ibid 48; UNODC (n 14) 48.

³⁹ Wyatt und Ngoc Cao (n 10) 12 – 13, 22 – 23; Transparency International – Austrian Chapter, 'Transparenz als Gegenmittel' (Webseite, undatiert).

⁴⁰ WWF und TRAFFIC (n 1) 3.

⁴¹ UNODC (n 14) 135 – 137.

⁴² Radha Ivory, 'Corruption Gone Wild: Transnational Criminal Law and the International Trade in Endangered Species' (2017) 111 *AJIL Unbound* 413, 416.

Korruption in der Justiz führt auch dazu, dass viele Kriminelle, die an Korruption und Wildtierschmuggel beteiligt sind, ungestraft davonkommen. Die Justiz kann nicht unabhängig agieren, wenn die Richter oder Staatsanwälte erpresst oder eingeschüchtert werden oder, wenn anderweitig Druck auf sie ausgeübt wird, zum Beispiel durch die Regierung, mit dem Ziel, sie in ihren Entscheidungen zu beeinflussen. Es handelt sich somit um einen Teufelskreis: Korruption entsteht, weil es Korruption gibt.⁴³ Korruptes Verhalten im Wildtierbereich wird außerdem häufig als Verbrechen ohne Opfer und ohne ernsthafte Konsequenzen aufgefasst. Wildtierbezogene Korruption scheint für die involvierten Personen demnach in moralischer Hinsicht häufig nicht problematisch zu sein, weil sie weit weg von dem Ort, an dem der Schaden eintritt, stattfindet. Das heisst, ihre Auswirkungen sind auf den ersten Blick nicht sichtbar.⁴⁴

Weiters gelten bestimmte wildtierbezogene Korruptionsformen in vielen Regierungen, Strafverfolgungsbehörden, Unternehmen und Organisationen als normaler Teil des Arbeitsalltags und nicht als soziales Tabu. Besonders in Staaten, in denen das Vertrauen in politische Autoritäten und Strafverfolgung gering ist, halten es viele Personen für vertretbar, wildtierbezogene Antikorruptionsgesetze zu umgehen, um sich selbst, ihre Familien oder Freunde zu begünstigen.⁴⁵ Abgesehen davon, begünstigt und fördert fehlendes Personal Korruption und Wildtierschmuggel erheblich. Mangelhafte Ausbildung bedeutet, dass sich Beamte und Angestellte über ihre Verpflichtungen und Verantwortlichkeiten, über die Gesetze und Vorschriften, die sie einhalten, durchsetzen und vollstrecken müssen, unsicher sind.⁴⁶ Beamte und Mitarbeiter im Wildtierbereich können aufgrund schlechter Bezahlung in Versuchung kommen oder dadurch gezwungen sein, ihr Einkommen durch Bestechungsgelder oder andere illegale Zuwendungen aufzubessern, zum Beispiel wenn sie eine große Familie zu versorgen haben.⁴⁷ Ein Interessenkonflikt bezeichnet in diesem Zusammenhang das Zusammentreffen von beruflichen Pflichten und persönlichen Interessen, das die Wahrnehmung der beruflichen Verantwortung beeinflussen kann, zum Beispiel wenn ein Beamter Freunde oder Familienmitglieder hat, die Verdächtige in einem wild-

43 UNODC (n 14) 115 – 117.

44 Ibid 165; Transparency International – Austrian Chapter (n 2) 77.

45 WWF und TRAFFIC (n 1) 3.

46 UNODC (n 14) 74 – 76.

47 WWF und TRAFFIC (n 1) 3.

tierbezogenen Korruptionsfall sind oder die spezifische Geschäftsinteressen im Wildtierbereich haben, für die der Beamte zuständig ist.⁴⁸

Es kann zwischen korrupten Aktivitäten, die aus Armut und Not erfolgen, zum Beispiel durch Wilderer, die meist zur armen Landbevölkerung zählen und darauf angewiesen sind, und zwischen jenen, die von Gier angetrieben werden, wie zum Beispiel *trophy hunting* durch vorrangig reiche Urlauber und Geschäftsleute, unterschieden werden. Beiden ist gemeinsam, dass mit wildtierbezogener Korruption grundsätzlich hoher Profit zu erwirtschaften ist.⁴⁹ Armut, Not und Geldgier sind nicht die einzigen Ursachen für wildtierbezogene Korruption. Die Ursachen sind häufig komplexer und je nach Lebenssituation von den jeweiligen Umständen der involvierten Personen abhängig. Wer in einem korrupten System im regionalen, nationalen und internationalen Wettbewerb überleben möchte, wird früher oder später genötigt, sich den korrupten Konventionen zu unterwerfen beziehungsweise sich anzupassen. Die Hemmschwelle sinkt, je mehr Existenzen von einem Wirtschaftszweig wie dem illegalen Wildtierhandel abhängig sind und, wenn keine unmittelbar Geschädigten erkennbar sind. Werden die Anfänge korrupten Handelns nicht unterbunden und bestraft, wird die Hemmschwelle weiter absinken und wildtierbezogene Korruption im Arbeitsalltag für selbstverständlich gehalten werden.⁵⁰ Lösungsvorschläge und Empfehlungen für Maßnahmen zur Bekämpfung von Korruption in Zusammenhang mit Wildtierschmuggel müssen sich an den Ursachen orientieren, um ihre volle Wirksamkeit zu entfalten. Spezifische Ursachen benötigen demnach individuelle Lösungen.

48 Musing et al (n 1) 10; Transparency International – Austrian Chapter (n 2) 59.

49 UNODC (n 14) 3, 17.

50 Thomas Ax, Matthias Schneider und Jacob Scheffen, *Rechtshandbuch Korruptionsbekämpfung: Prävention – Compliance – Vergabeverfahren – Sanktionen – Selbstreinigung* (2. Aufl., 2010) 53 [42].

VI. Gegenmassnahmen und Empfehlungen für Maßnahmen zur Bekämpfung von wildtierbezogener Korruption

Korruption erleichtert Wilderei und den illegalen Handel mit Wildtieren und verhindert die Festnahme und strafrechtliche Verfolgung der daran Beteiligten. Aus diesem Grund ist es notwendig, dass sich Antikorruptionsmaßnahmen an alle Stationen des Wildtierschmuggels richten.

1. Politik und Gesetzgebung

Für die Bekämpfung von Korruption und illegalem Wildtierhandel, insbesondere für die Definitionen der damit zusammenhängenden illegalen Aktivitäten, sind klare und durchsetzbare Gesetze unverzichtbar. Abgesehen davon sind viele Strategien und Maßnahmen nur durch politisches Engagement und politische Verpflichtung umsetzbar. *‘Good governance’*, gute Regierungsführung, bedeutet, dass das Regierungs- und Verwaltungssystem eines Staats auf den Grundsätzen von Rechtsstaatlichkeit und Transparenz basiert. Dazu zählt auch die Bekämpfung von wildtierbezogener Korruption in all ihren Ausprägungen.⁵¹

2. Strafverfolgung und Vollzug von Antikorruptionsgesetzen im Wildtierbereich

Es sollten gezielt Überprüfungen und Kontrollen durchgeführt werden, um Missstände zu verfolgen und Beamte, die an Korruption in Verbindung mit Wildtierschmuggel beteiligt sind, zu bestrafen. Die Erhöhung der Wahrscheinlichkeit der Aufdeckung kann als Abschreckungsmittel wirken.⁵² In diesen Bereich fällt auch die Einrichtung von auf wildtierbezogene Korruption spezialisierten Strafverfolgungsbehörden. In Südafrika wurde zum Beispiel im Jahr 2010 eine National Wildlife Crime Reaction Unit ins Leben gerufen, um

51 Wyatt und Ngoc Cao (n 10) 15 – 16, 28; Transparency International – Austrian Chapter (n 2) 51.

52 Wyatt und Ngoc Cao (n 10) 15, 27 – 28; Martini (n 4) 5 – 6; U4 Anti-Corruption Resource Centre (n 1); WWF und TRAFFIC (n 1) 22.

die Datenerhebung, den Informationsaustausch und die Zusammenarbeit zwischen den Strafverfolgungsbehörden im Bereich Korruption zu verbessern.⁵³

3. Personalmanagement und Umstrukturierung des Personalwesens im Wildtierbereich

Strategien und Maßnahmen, die sich auf das Personalwesen, insbesondere auf Einstellungen, Ausbildungen, Schulungen, Beförderungen und Gehälter beziehen, können helfen, eine gut ausgebildete, motivierte und integre Belegschaft aufzubauen, die fähig ist, Wildtierschmuggel und Korruption sicher zu bekämpfen.⁵⁴ Diese muss sich über die Gesetze und Vorschriften, die die Bekämpfung von Wildtierschmuggel und Korruption regeln, im Klaren sein. Dadurch werden sich die Mitarbeiter nicht nur ihrer Verantwortung und Pflichten bewusst, sondern auch angeleitet, wie sie sich in bestimmten Situationen verhalten müssen, um sich nicht strafbar zu machen. *CITES* bietet zum Beispiel virtuelle Kurse und Informationsmodule für Strafverfolgungsbehörden an. Auch die Nichtregierungsorganisation *TRAFFIC* (Trade Records Analysis of Flora and Fauna in Commerce) führt Schulungen durch, die Naturschutzangestellte, Zollbeamte, Polizisten, Ermittlungsbeamte, Richter und Staatsanwälte ansprechen sollen.⁵⁵

4. Sensibilisierung der Öffentlichkeit

Die Sensibilisierung der Gesellschaft, von Wildtierschutzorganisationen, der Strafverfolgungsbehörden und Gerichtsmitarbeiter bezüglich der Charakteristika, Auswirkungen und Zusammenhänge zwischen illegalem Wildtierhandel und Korruption ist unverzichtbar, um Korruption in diesem Bereich zu reduzieren und die Antikorruptionsmaßnahmen umsetzen zu können. Beamte, Angestellte im Wildtierbereich und die Gesellschaft sollten wissen, was wildtierbezogene Korruption ist, welche Korruptionsformen es gibt und welche Auswirkungen und Folgen Korruption insbesondere im Wildtierbereich

⁵³ UNODC (n 14) 67–69, 87–89; Martini (n 4) 5–6; WWF und TRAFFIC (n 1) 22.

⁵⁴ U4 Anti-Corruption Resource Centre (n 1); Martini (n 4) 6.

⁵⁵ Martini (n 4) 6.

haben kann. Regierungsbeamte, Wildtierschutzpersonal, Strafverfolgungsbehörden, Staatsanwälte, Richter und die Gesellschaft sollten sich über die ernststen Konsequenzen der wildtierbezogenen Korruption im Klaren sein; vor allem, dass es sich dabei nicht um ein Verbrechen ohne Opfer handelt.⁵⁶

5. Einzelfallabhängige Herangehensweise

In den meisten Forschungsberichten und Leitfäden kommen für Antikorruptionsmaßnahmen im Wildtierbereich nur die vier Bereiche: Politik und Gesetzgebung, Strafverfolgung, Personalmanagement sowie öffentliches Bewusstsein in Frage. Eine Ausnahme davon bildet das *Wildlife and Forest Crime Analytic Toolkit* des Büros der Vereinten Nationen für Drogen- und Verbrechenbekämpfung (United Nations Office on Drugs and Crime (UNODC)), das als eines der wenigen zusätzlich noch die Gerichtsbarkeit, die Verfügbarkeit und Analyse von Daten sowie Triebkräfte anspricht.⁵⁷ Dieses Kapitel greift den UNODC-Ansatz auf und vertieft ihn, indem sie eine differenzierte und einzelfallabhängige Herangehensweise vorschlägt, die der Komplexität und dem Facettenreichtum der Problematik entspricht. Um möglichst flexibel und situationsbezogen agieren zu können, sollten Strategien in folgenden Bereichen mitberücksichtigt werden:

5.1. Integrität, Unbestechlichkeit und ethisches Verhalten

Es ist schwierig und aufwendig, eine Kultur der Integrität innerhalb Organisationen oder Behörden zu verankern. Die Weltzollorganisation hat zum Beispiel ein Projekt zur Verbesserung der Integrität in 15 afrikanischen Ländern in Verbindung mit der Durchsetzung von *CITES* gestartet (Projekt GAPIN).⁵⁸ Konkrete Maßnahmen für den Bereich Integrität beinhalten die Erstellung eines Verhaltenskodex, die Aufstellung ethischer Richtlinien für

⁵⁶ Wyatt und Ngoc Cao (n 10) 16, 29; UNODC (n 14) 165; Aksel Sundström und Tanya Wyatt, 'Corruption and Organized Crime in Conservation' in Meredith L Gore (Hrsg.), *Conservation Criminology* (2017) 97, 108; Musing et al (n 1) 19; U4 Anti-Corruption Resource Centre (n 1).

⁵⁷ UNODC (n 14).

⁵⁸ Martini (n 4) 5.

Personal im Wildtierbereich sowie die Schulung des Personals in ethischem Verhalten.

5.2. Justizielle Unabhängigkeit, Gewaltentrennung

Damit Gerichte einwandfrei, effektiv und rechtmäßig funktionieren können, müssen sie frei von unangemessener, rechtswidriger Einflussnahme durch die Regierung und durch private Interessen sein. Justizielle Unabhängigkeit kann durch folgende Maßnahmen unterstützt und gefördert werden: Anstellung auf Lebenszeit, angemessene Bezahlung der Richter und Staatsanwälte, Kontrolle von gerichtlichen Funktionen, der Absetzung und Versetzung von Richtern und Staatsanwälten, Erstellung von Verfahrensregeln und einer Geschäftsordnung, Überprüfung auf Interessenskonflikte bei Richtern, Weisungsfreiheit der Staatsanwälte vom Justizministerium. Es kann notwendig sein, eine unabhängige (interne) Institution einzurichten, die die Aufgabe hat, richterliche Handlungen beziehungsweise gerichtliche Rechtsprechungstätigkeit und justizielle Arbeit zu überwachen, zu überprüfen und zu kontrollieren. Sie sollte mögliche Ordnungswidrigkeiten und Verstöße gegen Gesetze oder Verhaltenskodexe und potenzielle Interessenskonflikte untersuchen sowie korruptes, inkompetentes und unethisches Fehlverhalten sanktionieren.⁵⁹

Ein gelungenes Beispiel für justizielle Unabhängigkeit stellt das Wilderei-Gericht von Skukuza im Krüger Nationalpark in Südafrika dar. Es wurde zur Unterstützung der Bekämpfung von Nashorn-Wilderei-Straftaten eingerichtet und ist seit 7. März 2017 in Betrieb. Das Gericht stellt sicher, dass die Bearbeitungszeiten für Nashornwilderei und damit zusammenhängende Fälle beschleunigt werden und nicht vertuscht werden. Dies trägt wesentlich zur Bekämpfung des illegalen Wildtierhandels bei. Die Wilderei von Nashörnern wurde zu einem vorrangigen nationalen Verbrechen (*priority crime*) erklärt und die Regierung versucht dadurch Antikorruptionsmaßnahmen im Wildtierbereich umzusetzen. Hierbei handelt es sich um einen behördenzusammenarbeitenden, multisektoralen und interdisziplinären Ansatz.⁶⁰

59 Transparency International – Austrian Chapter (n 2) 6; Martini (n 4) 6.

60 South African Government, 'Minister Edna Molewa welcomes opening of Skukuza Regional Court in Kruger National Park' (Webseite, 21. April 2017).

5.3. Haftung und Verantwortlichkeit von Personal im Wildtierbereich

Das ganze Personal sollte angemessen kontrolliert und beaufsichtigt werden. Es sollte nicht nur gegenüber der jeweiligen Geschäftsführung, sondern auch gegenüber der Öffentlichkeit Rechenschaft für ihre Arbeit ablegen und dafür Verantwortung übernehmen müssen.⁶¹ Mögliche Maßnahmen für diesen Bereich sind die Sensibilisierung des Personals für ihre Arbeitsleistung und die damit verbundene Verantwortung, die Einrichtung einer Kronzeugenregelung sowie Berichterstattungs-, und Beschwerdemöglichkeiten für die Meldung von korruptem Fehlverhalten. Die Kommunikation und gegenseitige Überwachung zwischen Behörden und Organisationen, die im Wildtierschutz tätig sind, sollte nicht unterschätzt werden. In diesem Zusammenhang spielt auch die transparente Strafverfolgung von wildtierbezogenen Korruptionsdelikten eine wichtige Rolle.

5.4. Beweissicherung und -verwahrung und korrekte Dokumentation von Handelsurkunden und Gerichtsakten

Das Führen und die Erstellung von korrekten Aufzeichnungen und die laufende Kontrolle von Wildtierprodukten, Beweisen, Daten und Dokumentation erschwert es Kriminellen, korrupten Beamten und Mitarbeitern, Erlöse aus dem illegalen Wildtierhandel zu waschen, Korruption zu verschleiern und sich Untersuchungen zu entziehen, um so der Strafverfolgung zu entgehen.⁶² Aus diesem Grund zählen die klare Kennzeichnung von legalen Handelsprodukten und lückenlose Produktketten, die Überprüfung der Echtheit von Wildtierdokumenten und Lieferscheinen, und die korrekte Sicherung und Verwahrung von Beweisen und Daten aus wildtierbezogenen Korruptionsfällen zu den erfolgversprechendsten Maßnahmen in diesem Bereich.

61 UNODC (n 14) 111 – 113.

62 WWF und TRAFFIC (n 1) 25.

5.5. Vereinfachte Genehmigungsverfahren und Ausstellung von Lizenzen im Wildtierbereich

Genehmigungsverfahren für die legale Ein- und Ausfuhr von Wildtierprodukten und Ausstellung von Jagdlizenzen sollten effektiv sein und keine unnötigen Hindernisse darstellen, zum Beispiel keinen übermäßigen bürokratischen Aufwand bedeuten. Andernfalls können sie Anreize für korruptes Verhalten schaffen, indem damit bürokratische Hürden umgangen, beschleunigt und erleichtert werden sollen. Dies kann auch die Wahrscheinlichkeit dafür erhöhen, dass Beamte nicht oder nur unzureichend prüfen, ob die Bewerber alle Anforderungen und Voraussetzungen ordnungsgemäß erfüllen. *CITES* stellt beispielsweise Richtlinien zur Verfügung, die Informationen für Genehmigungen und Lizenzen beinhalten. Prozesse sollten so weit wie möglich rationalisiert und optimiert werden und regelmäßige Überprüfungen und Evaluierungen beinhalten, wie die Wirksamkeit verbessert werden kann. Darüber hinaus ist es wichtig, dass die Verfahren und Prozesse den internationalen Rahmenbedingungen entsprechen, das heißt Amtsträgern oder Angestellten internationaler Organisationen wie *CITES*-Verwaltungsangestellte wenig Raum für Ermessensentscheidungen zu lassen. Die Verwendung elektronischer Verfahren kann dazu beitragen, den Kontakt zwischen Antragstellern und Amtsträgern zu verringern und Bestechungsversuche dadurch zu reduzieren.⁶³ Andere mögliche Maßnahmen sind die Abschaffung von überhöhten Kosten und Gebühren für Lizenzen, Genehmigungen und Konzessionen, sowie die Abschaffung von unnötigen Anforderungen und Voraussetzungen für Lizenzen zur Reduktion der Bürokratie und das Verbot überflüssiger Verzögerungen bei der Bearbeitung von Anträgen für Genehmigungen.

5.6. Zusammenarbeit im Wildtierbereich

Sowohl Korruption als auch der Wildtierschmuggel sind sektorübergreifende Probleme, an denen häufig internationale Akteure beteiligt sind. Es ist daher von entscheidender Bedeutung, dass die an der Bekämpfung von wildtierbezogener Korruption beteiligten Behörden auf nationaler und internationaler Ebene zusammenarbeiten, um sicherzustellen, dass Informationen, Beweise,

63 Sundström und Wyatt (n 56) 109; Martini (n 4) 5.

Verfahren und Produkte ausgetauscht und weiterverfolgt werden.⁶⁴ Für die zwischenstaatliche Zusammenarbeit sind transnationale Maßnahmen und völkerrechtliche Verträge unabdingbar. Häufig fungieren internationale Organisationen als Forum für Zusammenarbeit, Informationsaustausch und Rechtshilfe.⁶⁵ Die Verbesserung und Stärkung der Kommunikation zwischen den verschiedenen Organisationen und Behörden, die am Schutz von Wildtieren beteiligt sind, kann Abweichungen bei den Informationen offenlegen. Dies kann auf Korruption hinweisen. Berichten etwa Zollbeamte, dass sie eine größere Anzahl von Genehmigungen und Lizenzen prüfen, als die zuständigen Behörden ausstellen, deutet dies auf die Fälschung von Lizenzen und Genehmigungen im großen Stil hin. Zollbeamte sollten daher zum Beispiel speziell geschult werden, um echte Genehmigungen von gefälschten zu unterscheiden.⁶⁶

5.7. Schutz im Wildtierbereich

Personen und Organisationen, die im illegalen Handel mit Wildtieren tätig sind, einschließlich organisierter krimineller Gruppen und Netzwerke, können sich körperlicher Gewalt oder anderer Formen der Einschüchterung und Nötigung bedienen. Politische Entscheidungsträger, Gesetzgeber, Strafverfolgungsbehörden und Korruptionsbekämpfungsinstitutionen sollten daher Maßnahmen ergreifen, die sicherstellen, dass Personen, die versuchen, Wildtierkriminalität zu bekämpfen, vor solchen Risiken und Gefahren geschützt werden. Zu den schutzbedürftigen Personen zählen beispielsweise Wildtierhüter und Ranger, Polizisten, Staatsanwälte und Richter sowie Opfer und Zeugen. Wo es notwendig und angemessen ist, sollten Möglichkeiten erwogen werden, wie man Beweise erbringen und mit Zeugen und Opfern umgehen kann, ohne ihren Aufenthaltsort oder ihre Identität offenlegen zu müssen. Die Anonymität von Whistleblowern und Informanten sollte, soweit wie möglich, geschützt werden, zum Beispiel durch die Einrichtung anonymen Berichterstattungsmechanismen für wildtierbezogene Korruptionsfälle.⁶⁷

64 Musing et al (n 1) 7, 19.

65 UNODC (n 14) 129 – 131; Transparency International – Austrian Chapter (n 2) 61.

66 WWF und TRAFFIC (n 1) 20.

67 Ibid 22.

5.8. Bekämpfung von wildtierbezogener Geldwäscherei

Die Vermeidung, Untersuchung und Bestrafung von Bereicherung durch Erlöse aus dem illegalen Wildtierhandel kann wirksamer sein als sich direkt auf Korruption oder bestimmte Fälle von Wildtierschmuggel zu konzentrieren. Unerlaubte Bereicherung kann leichter erkannt und angegangen werden als Korruption. In vielen Staaten besteht bereits ein rechtlicher und politischer Rahmen für die Bekämpfung von Korruption im Sinne von persönlicher Bereicherung, zum Beispiel durch Erlöse aus dem Wildtierschmuggel. Das *Übereinkommen der Vereinten Nationen gegen Korruption* stellt ein wirksames Werkzeug für die Umsetzung von Maßnahmen zur Geldwäschereibekämpfung dar.⁶⁸ Die wenigen Staaten, die diesem Übereinkommen noch nicht beigetreten sind, sollten zum Beitritt ermutigt werden.⁶⁹ Zur wirksamen Bekämpfung von Geldwäsche trägt auch die Zusammenarbeit mit Finanzinstituten und Banken bei.

VII. Conclusio

Bereits die Definitionsversuche der Begrifflichkeiten ‘illegaler Wildtierhandel’ und ‘Korruption’ zeigen, dass die Schnittstelle zwischen Korruption und Wildtierschmuggel selten im Speziellen behandelt wird. Ähnlich wie die Definitionen, sind auch die potenziellen Ursachen sowie die Folgen und Auswirkungen von wildtierbezogener Korruption mannigfaltig und sehr unterschiedlich. Durch eine Gesamtschau wird klar, dass die positiven Folgen nur die jeweils Beteiligten treffen, während die negativen Auswirkungen aus kriminologischer Sicht wesentlich bedeutender und umfangreicher erscheinen. Die negativen Folgen von wildtierbezogener Korruption wirken sich auf moralische, soziale, wirtschaftliche und politische Bereiche aus. Wildtierbezogene Korruption ist demokratieschädigend, weil sie zur Schwächung und Verschlechterung der Rechtsstaatlichkeit führt und Populisten dadurch an Macht gewinnen. Daraus ergibt sich ein Teufelskreis: Korruption in Zusam-

68 Eröffnet zur Unterzeichnung 31. Oktober 2003, 2349 UNTS 41 (in Kraft getreten 14. Dezember 2005).

69 WWF und TRAFFIC (n 1) 26; Tanya Wyatt et al, ‘Corruption and Wildlife Trafficking: Three Case Studies Involving Asia’ (2018) 13 *Asian Criminology* 35, 38 – 39; UNODC (n 14) 48.

menhang mit Wildtierschmuggel untergräbt demokratische Institutionen und geschwächte Institutionen sind noch weniger in der Lage, wildtierbezogene Korruption effektiv zu kontrollieren. Festgefahrene Traditionen und Strukturen sowie die Tatsache, dass Korruption in manchen Ländern überlebensnotwendig ist, erschweren tiefgreifende Reformen in den Bereichen Korruption und Wildtierschmuggel. Grundsätzlich handelt es sich bei wildtierbezogener Korruption im Großen und Ganzen um wiederkehrende, ähnliche Abläufe und Muster. Auch die Akteure und Stationen überschneiden sich häufig. Im Einzelfall gibt es aber entscheidende feine, detaillierte Unterschiede. Nicht alle genannten Strategien sind für sämtliche korruptionsanfällige Situationen im Wildtierbereich relevant und darauf anwendbar, weil sich die Situationen von Fall zu Fall unterscheiden. Daher sollten Einzelpersonen und Gruppen, die es sich zur Aufgabe gemacht haben, Korruption zu bekämpfen, zuerst die spezifischen Umstände und Verhältnisse in ihrem Land und im jeweiligen Arbeitsumfeld evaluieren und abhängig davon gezielt die dafür sinnvollsten und geeignetsten Strategien und passenden Maßnahmen herausfiltern und anwenden. Es darf nicht außer Acht gelassen werden, dass strengere Maßnahmen auch Nachteile und Gefahren mit sich bringen können, zum Beispiel unbeabsichtigte Konsequenzen für die Menschenrechte und unentdeckte ideologische oder ideelle Beschränkungen. Eine transnationale Tierschutzkonvention, die wildtierbezogene Korruption verbietet, kann beispielsweise dabei versagen, Wildtiere zu schützen und stattdessen, andere Rechte, die dem Wohl der Allgemeinheit dienen, einschränken.⁷⁰ Außerdem gibt es wenig aktuelle Information oder Literatur zu gegenwärtigen Antikorruptionsinitiativen, insbesondere keine gesicherten Daten oder Beweise, dass sich dadurch Korruption wirksam reduzieren ließe. Aus diesem Grund sollten individuelle Maßnahmen an die konkreten Umstände der jeweiligen Situation angepasst werden. Die meisten existierenden Strategien und Maßnahmen legen ihr Augenmerk aber auf die immergleichen, allgemeinen, undifferenzierten Bereiche. Auffallend ist, dass der Großteil der Literatur mehrheitlich den Fokus ausschließlich auf die Bekämpfung von bereits existierender wildtierbezogener Korruption richtet und Präventionsmaßnahmen komplett vernachlässigt. Will man das Problem aber an der Wurzel packen, sollte ihr Wert nicht unterschätzt werden. Um wildtierbezogene Korruption wirksam bekämpfen zu können, sollte ein breiter Ansatz verfolgt und eine individuelle, einzelfallabhängige Herangehensweise gewählt werden, um flexibel reagieren

70 Ivory (n 42) 418.

zu können, denn spezifische Ursachen benötigten spezifische Maßnahmen beziehungsweise Lösungen. Theoretische Konzepte, Strategien und Maßnahmen zur Bekämpfung von Korruption in Verbindung mit Wildtierschmuggel sind zwar vorhanden, werden aber selten umgesetzt und implementiert. Es gibt keine Antworten, Anhaltspunkte oder Informationen in der Literatur, die Hinweise darauf geben, woran es liegt, dass die Umsetzung regelmäßig scheitert. Man kann folglich nur mutmaßen. Transparency International schlägt in diesem Zusammenhang vor, die betreffenden Staaten öffentlich darauf hinzuweisen und an sie zu appellieren.⁷¹

Aufgrund der vielen Verbindungen und Verflechtungen zwischen illegalem Handel mit Wildtieren und Korruption sollten beide Bereiche gemeinsam behandelt werden. Personen, die mit illegalem Wildtierhandel beauftragt sind und Personen, die Korruption bekämpfen, sollten eng miteinander zusammenarbeiten und koordiniert vorgehen, um der umfassenden Problematik Herr zu werden.

Bibliographie

- Ax, Thomas, Matthias Schneider und Jacob Scheffen, *Rechtshandbuch Korruptionsbekämpfung: Prävention – Compliance – Vergabeverfahren – Sanktionen – Selbstreinigung*, Berlin: Erich Schmidt, 2. Aufl., 2010
- Austrian Press Agency, '20 Jahre Haft für Nashorn-Wilderer in Südafrika', *Salzburger Nachrichten* (Webseite, 11. September 2017) <<https://www.sn.at/panorama/international/20-jahre-haft-fuer-nashorn-wilderer-in-suedafrika-17330173>>
- Dalberg, *Fighting illicit wildlife trafficking: A consultation with governments*, Gland: WWF, 2012
- EIA, *Vietnam's Illegal Rhino Horn Trade: Undermining the Effectiveness of CITES*, Washington, DC: EIA, Februar 2013
- Ivory, Radha, 'Corruption Gone Wild: Transnational Criminal Law and the International Trade in Endangered Species' (2017) 111 *AJIL Unbound* 413
- Leader-Williams, Nigel, Robert J Smith und Rolf D Baldus, 'The Influence of Corruption on the Conduct of Recreational Hunting' in in Barney Dickson, Jon Hutton

⁷¹ Transparency International, 'Foreign bribery rages unchecked in over half of global trade' (Webseite, 12. September 2018).

- und William M Adams (Hrsg.), *Recreational Hunting, Conservation and Rural Livelihoods: Science and Practice*, Oxford und Hoboken, NJ: Wiley-Blackwell, 2009, 296
- Lemieux, Andrew M und Ronald V Clarke, 'The International Ban on Ivory Sales and its Effect on Elephant Poaching in Africa' (2009) 49 *British Journal of Criminology* 451
- Martini, Maira, *Wildlife crime and corruption*, U4 Expert Answer, Berlin: Transparency International e. V., 15 February 2019
- Musing, Louisa et al, *Corruption and Wildlife Crime. A Focus on Caviar Trade*, London: TRAFFIC e. V., February 2019
- South African Government, 'Minister Edna Molewa welcomes opening of Skukuza Regional Court in Kruger National Park' (Webseite, 21. April 2017) <<https://www.gov.za/speeches/skukuza-regional-court-21-apr-2017-0000>>
- Sundström, Aksel und Tanya Wyatt, 'Corruption and Organized Crime in Conservation' in Meredith L Gore (Hrsg.), *Conservation Criminology*, Somerset: John Wiley & Sons., 2017, 97
- Transparency International – Austrian Chapter, 'Definition von Korruption' (Webseite, undatiert) <<https://www.ti-austria.at/worum-es-geht/korruptions-grundwissen/definition-von-korruption/>>
- Transparency International – Austrian Chapter, 'Transparenz als Gegenmittel' (Webseite, undatiert) <<https://www.ti-austria.at/worum-es-geht/korruptions-grundwissen/transparenz-als-gegenmittel/>>
- Transparency International – Austrian Chapter, *Das ABC der Antikorruption*, Wien: Transparency International – Austrian Chapter, 2. Aufl., 2016
- Transparency International, 'Foreign bribery rages unchecked in over half of global trade' (Webseite, 12. September 2018) <<https://www.transparency.org/news/feature/exporting-corruption-2018>>
- Transparency International, 'What is Corruption?' (Webseite, 2020) <<https://www.transparency.org/what-is-corruption#define>>
- U4 Anti-Corruption Resource Centre, 'What is corruption?' (Webseite, undatiert) <<https://www.u4.no/topics/anti-corruption-basics/basics>>
- UNODC, *Wildlife and Forest Crime Analytic Toolkit*, New York, NY: United Nations, rev ed 2012
- WWF und TRAFFIC, *Strategies for Fighting Corruption in Wildlife Conservation: A Primer*, Gland: WWF, 2015

WWF, TRAFFIC und U4 Anti-Corruption Resource Centre, *Wildlife crime and corruption: options for moving forward*, London: WWF, 2018

Wyatt, Tanya et al, 'Corruption and Wildlife Trafficking: Three Case Studies Involving Asia' (2018) 13 *Asian Criminology* 35

Wyatt, Tanya und Anh Ngoc Cao, *Corruption and wildlife trafficking*, U4 Issue No 11, Bergen: U4 Anti-Corruption Resource Centre, May 2015

Chapter Four

‘When the Buying Stops, the Killing Can, too’: Wildlife Trafficking and Demand Reduction

JACK FULLER

Demand reduction campaigns are a relatively new way of stemming instances of wildlife trafficking. Such campaigns involve attempting to decrease the desire to purchase trafficked products, and to achieve an actual shift in buyer behaviour away from these products. Where they are successful, they effect dramatic decreases in consumer markets. This chapter discusses the main drivers of consumer demand, the strategies employed to target them and where they have been successful, before identifying best practice methodologies and areas for future research.

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I. Introduction

For decades, stakeholders have been trying to stem wildlife trafficking, one species at a time. Occasionally, this has yielded some success; many times, it resulted in failure. To this day, most anti-wildlife trafficking efforts aim to deter suppliers: the poachers, who carry out the killing; the traffickers, who smuggle carcasses and animal derivatives into consumption markets; and the retailers, who profit from the foregoing. Campaigns targeting a change in consumer behaviour have been a secondary consideration, if that.¹ This is slowly changing. There is now an increased focus on reducing demand for trafficked wildlife in order to hamper trade and lower the incentive to pilfer wildlife populations for profit.²

Utilising demand reduction campaigns in conjunction with implementing punitive measures – referred to as the ‘twin-track approach’ – is now widely recognised as the favoured strategy when aiming to reduce the wildlife trafficking.³ For example, a 2017 United Nations General Assembly resolution urged Member States to reduce demand for trafficked wildlife by ‘using targeted and evidence-based strategies in order to influence

1 As at 2018, less than 250 campaigns to reduce demand for trafficked wildlife had been recorded. See Diogo Verissimo and Anita K Y Wan, ‘Characterizing efforts to reduce demand for wildlife products’ (2019) 33(3) *Conservation Biology* 623, 626; but see Gayle Burgess et al, *Reducing Demand for Illegal Wildlife Products: Research Analysis on Strategies to Change Illegal Wildlife Product Consumer Behaviour* (September 2018) 7.

2 Verissimo and Wan (n 1) 626; Daniel W S Challender and Douglas C MacMillan, ‘Poaching is more than an Enforcement Problem’ (2014) 7(5) *Conservation Letters* 484, 490.

3 Burgess et al (n 1) 16; UN General Assembly, *Tackling Illicit Trafficking in Wildlife*, UN Doc A/RES/69/314 (19 August 2015) 4.

consumer behaviour and create greater awareness of laws prohibiting illegal trade in wildlife and associated penalties'.⁴

Reducing demand for trafficked wildlife (which, unless stated otherwise includes animals, alive or dead, animal parts, products, and derivatives) is a two-step process.⁵ The first step is to decrease consumer intent to purchase products. The second is to achieve an actual shift in buyer behaviour away from such products. Campaigns to reach this goal have therefore been defined as 'outreach interventions aimed to voluntarily change actual behaviour of current or potential consumers of wildlife products or their derivatives'.⁶ Coaxing voluntary behaviour change is no easy task. There are myriad of reasons why consumers are driven to purchase trafficked wildlife. Without a thorough understanding of these drivers, change is not possible. When demand reduction campaigns are executed in accordance with best practice, they can return remarkable results; when they are not, they can be a waste of precious time, money, and resources.

This chapter first examines and categorises the main drivers of demand for trafficked wildlife, and how they influence purchasing behaviour. Current demand reduction techniques are then analysed, pairing them with the relevant drivers to ensure they are most effective. Successful campaigns are discussed, and by identifying the reasons for their success, a best practice approach is identified. Recommendations are made for the next step in demand reduction, including highlighting current knowledge gaps, and building on the idea of a central repository of data so that future campaigns have a better chance at creating change, and saving the planet's most vulnerable species.

4 UN General Assembly, *Tackling Illicit Trafficking in Wildlife*, UN Doc A/71/L.88 (5 September 2017) 5.

5 Gayle Burgess, 'Powers of Persuasion? Conservation Communications, Behavioural Change and Reducing Demand for Illegal Wildlife Products' (2016) 28(2) *TRAFFIC Bulletin* 65, 66.

6 Verissimo and Wan (n 1) 625.

II. Drivers of demand

Successful demand reduction campaigns require an understanding of the factors driving the purchase of trafficked wildlife. Demand is highly nuanced; the impulses that drive a decision to purchase wildlife commodities vary greatly with respect to, *inter alia*, species, product, and consumer demographic. While many attempts to categorise these drivers have been made, some more complex than others, the body of research reveals the prevalence of two main drivers in the vast majority of purchases: (1) a desire to increase one's social status among their peers; and (2) the desire to use trafficked wildlife for medicinal purposes.⁷ These drivers are not mutually exclusive, nor are they exhaustive. Many other reasons for consumption also exist, including cultural tradition and religion, food and necessity, and speculation.

1. Social status

For many products, a desire to improve social status is the main reason for purchase, particularly in East Asia, the world's biggest consumer market for trafficked wildlife.⁸ With the continuing rise of the wealthy younger generation – a particularly status-conscious demographic – status-related purchases may increase substantially, making an understanding of this driver vital to the future success of demand reduction campaigns.⁹

The desire is so powerful, some retailers suffering declines in sales now market their wildlife products as status items, and they do so with success.¹⁰ Products bought for this reason are often statement pieces, and

7 See, for example, Laura A Thomas-Walters, *Mapping Motivations: Combatting consumption of illegal wildlife in Viet Nam* (December 2017) 3; USAID Wildlife Asia, *What Drives Demand for Wildlife? A Situation Analysis of Consumer Demand for Wildlife Parts and Products in China, Thailand and Vietnam based on a Literature Review*, Situation Analysis (2017) 8.

8 Challender and MacMillan (n 2) 486; USAID Wildlife Asia (n 7) 2.

9 Wander Meijer et al, *Demand under the Ban: China Ivory Consumption Post-Ban 2018* (September 2018) 66.

10 Steven Broad and Richard Damania, *Competing demands: Understanding and addressing the socio-economic forces that work for and against tiger conservation*, Global Tiger Initiative Thematic & Working Paper Series (April 2010) 5 – 6.

include curios, fashion items, and gifts, the latter reflecting positively on both the recipient and the purchaser.¹¹ Status-related purchases often invoke feelings of pride, confidence, and empowerment.¹² These are hedonistic transactions, often conferring no tangible benefit on the buyer outside the psychological; in other words, they are purely discretionary purchases.¹³ Common factors that enhance the desirability are the product's expense, rarity, and, in some markets, illegality.

1.1. Expense

For a product to enhance status, it is usually predicated on some form of exclusivity; products of greater cost correlate strongly with purchases for reasons of social status.¹⁴ As prices rise, the available market contracts, thereby increasing a product's exclusivity and status-enhancing properties. This is especially true of the trade in endangered living animals and has been seen in the turtle, snake, and sturgeon trade.¹⁵

Food that is consumed to confer status usually comes at a high cost to consumers. For example, meat of the pangolin, a small, scaly animal native to Africa and Asia and considered the world's most trafficked mammal, is often eaten for status reasons.¹⁶ Consumers are usually

11 USAID Wildlife Asia (n 7) 8; GlobeScan, *Reducing Demand for Ivory: An International Study* (August 2015) 12; Meijer et al (n 9) 29.

12 GlobeScan (n 11) 12.

13 Thomas-Walters (n 7) 4; GlobeScan (n 11) 15.

14 Rebecca Drury, 'Hungry for Success: Urban Consumer Demand for Wild Animal Products in Vietnam' (2011) 9(3) *Conservation and Society* 247, 250; Broad and Damania (n 10) 6; Daniel Challender et al, 'Understanding Markets to Conserve Trade-Threatened Species in CITES' (2015) 187 *Biological Conservation* 249, 256.

15 Yik-Hei Sung and Johnathan J Fong, 'Assessing Consumer Trends and Illegal Activity by Monitoring the Online Wildlife Trade' (2018) 227 *Biological Conservation* 219, 223; Agnès Gault, Yves Meinard and Franck Courchamp, 'Consumers' Taste for Rarity Drives Sturgeons to Extinction' (2008) 1 *Conservation Letters* 199, 203.

16 Sarah Heinrich et al, *The Global Trafficking of Pangolins: A Comprehensive Summary of Seizures and Trafficking Routes from 2010 – 2015*, TRAFFIC Report (December 2017) vi; Alex Aisher, 'Scarcity, Alterity and Value: Decline of the Pangolin, the World's Most Trafficked Mammal' (2016) 14(4) *Conservation and Society* 317, 320; Daniel W S Challender, Carly Waterman and Jonathan E M Baillie, *Scaling Up Pangolin Conservation: IUCN SSC Pangolin Specialist Group Conservation Action Plan* (July 2014) 16.

businessmen and women seeking to impress existing or prospective clients. Consumption arouses feelings of importance and prestige due to its perception as an ‘expensive status symbol’.¹⁷ A 2017 study found that consumers of pangolin meat in Vietnam were high or upper middle income earners, and chose the product in part due to its high price, which conveys prestige among peers.¹⁸

1.2. Rarity

Product rarity is another prominent driver of demand and can be linked to expense and exclusivity. The fewer consumers that have access to a product, whether by financial inaccessibility, scarcity, or otherwise, the more exclusive the product; the more exclusive the product, the more attractive it becomes for wealthy consumers.¹⁹ A 2008 publication found that apparent rarity even affects taste: where respondents were offered two identical samples of caviar, one from a ‘common’ species and one from a ‘rare’ species, the latter was preferred, regardless of whether the respondent was a novice or regular caviar consumer.²⁰ These findings were supported by other research that found similar perceptions about pangolin meat.²¹

Occasionally, rare pets are more sought-after than captive-bred alternatives. While fish and amphibians for pets are mostly drawn from sustainable sources, a preference for illegally-caught, rarer specimens has been exhibited in birds and reptiles.²²

Typically, the fiscal relationship between supply and demand theorises that when supply dwindles, prices increase, thereby reducing demand to the point where goods become prohibitively expensive to source: a

17 Challender et al (n 14) 255; Christina Vallianos, *Pangolins on the Brink* (2017) 21.

18 USAID Wildlife Asia (n 7) 13.

19 Data is scarce but see, for example, Franck Courchamp et al, ‘Rarity Value and Species Extinction: The Anthropogenic Allee Effect’ (2006) 4(12) *PLoS ONE*: e415 [s.p.]; Sung and Fong (n 15) 223.

20 Gault, Meinard and Courchamp (n 15) 203.

21 Challender et al (n 14) 255.

22 Michael Harfoot et al, ‘Unveiling the Patterns and Trends in 40 years of Global Trade in CITES-listed Wildlife’ (2018) 223 *Biological Conservation* 47, 50; Jessica A Lyons and Daniel J D Natush, ‘Effects of Consumer Preferences for Rarity on the Harvest of Wild Populations Within a Species’ (2013) 93 *Ecological Economics* 278.

phenomenon called the ‘bionomic equilibrium’.²³ Theoretically, this hypothesis should protect species from extinction: if a commodity becomes too expensive to purchase, demand should decrease to the point where garnering supply is no longer commercially viable. This has not been the case with respect to the consumption of trafficked wildlife.²⁴ The willingness of wealthy consumers to pay exorbitant prices for trafficked wildlife outweighs the costs of sourcing, and risk of poaching, for suppliers.²⁵

1.3. Illegality

Examples exist of demand that is driven by the allure of a product’s illegality. The retail and consumption of wildmeat (meat processed from animals killed outside commercial harvesting),²⁶ including tiger and pangolin, can be driven by the exclusivity that results from the unlawful consumption, or a recalcitrant attitude towards the law.²⁷ In Indonesia, illegal ownership of protected birds can denote power and status: a person owning the animal illegally is seen as being ‘above the law’.²⁸

2. Medicine

The use of wildlife for medicinal purposes is a practice that dates back centuries—particularly in China, Japan, the Korean peninsula, and

23 See Colin W Clark, *Mathematical Bioeconomics: The Mathematics of Conservation* (3rd ed, 2010) 16.

24 Ibid.

25 Matthew Holden and Eve McDonald-Madden, ‘High Prices for Rare Species Can Drive Large Populations Extinct: The Anthropogenic Allee Effect Revisited’ (2017) 429 *Journal of Theoretical Biology* 170, 170 – 171.

26 Margaretha Pangau-Adam, Richard Noske and Michael Muehlenberg, ‘Wildmeat or Bushmeat? Subsistence Hunting and Commercial Harvesting in Papua (West New Guinea), Indonesia’ (2012) 40 *Human Ecology* 611, 612. This paper uses the term ‘wildmeat’, as ‘bushmeat’ impliedly ignores aquatic animals. ‘Bushmeat’ has also been used to denote meat killed for local consumption, which does not raise the specific issue of trafficking, see, for example, UNODC, *Wildlife and Forest Crime Analytic Toolkit* (rev ed, 2012) 146.

27 See, for example, Broad and Damania (n 10) 7; Vallianos (n 17) 20.

28 Vanda Felbab-Brown, *The Extinction Market: Wildlife Trafficking and How to Counter It* (2017) 222 – 223.

Vietnam—and continues today.²⁹ Common present-day examples are seen in the use of Traditional Chinese Medicine, which includes consuming rhinoceros horn to treat rheumatism, cancer, impotence, and effects of a stroke, tiger parts to ease bone-related pain and arthritis, pangolin to treat skin diseases, wound infections, and cancer; and shark liver oil to boost the immune system and fight cancer.³⁰

Traditional Chinese medicine is not only used for specific ailments. Tonics are ingested to benefit the consumer with qualities commonly associated with the animal. For example, tiger bone is added to wine to be consumed as a tonic, while tiger penis is often used for to promote virility.³¹ Similarly, rhinoceros horn is ground up and mixed with water for this purpose, and pangolin scales were once used to treat nervousness in children.³²

There are some traditional medicine products that are recognised drugs in both Western and traditional Chinese medicine. The active ingredient in bear bile, ursodeoxycholic acid, is possibly effective in preventing or managing liver cirrhosis, colon cancer, and gallstones.³³ A synthetic form of ursodeoxycholic acid is used in Western medicine. Consumers of traditional Chinese medicine, on the other hand, have a strong preference for wild bear bile than the synthetic alternative.³⁴ Consumers of traditional Chinese medicine, however, do not wholly discount Western alternatives. Instead, they are used for different purposes: Western medicine is often preferred for faster action, while traditional Chinese medicine is preferred due to the perceived lack of side effects.³⁵

²⁹ Broad and Damania (n 10) 7.

³⁰ Viet Nam CITES Management Authority, *Viet Nam Rhino Horn Demand Reduction Campaign: Campaign Report 2013 – 2016* (c 2017) 1; USAID Wildlife Asia (n 7) 10; Vallianos (n 17) 10; Christina Vallianos et al, *Sharks in Crisis: Evidence of Positive Behavioural Change in China as New Threats Emerge* (2018) 17.

³¹ Broad and Damania (n 10) 7.

³² Alex Kennaugh, *Rhino Rage: What is Driving Illegal Consumer Demand for Rhino Horn* (March 2016) 9; Vallianos (n 17) 10.

³³ Adam J Dutton, Cameron Hepburn and David W Macdonald, 'A Stated Preference into the Chinese Demand for Farmed v Wild Bear Bile' (2011) 6(7) *PLoS ONE*: e21243 [s.p.].

³⁴ Ibid; UNODC, *World Wildlife Crime Report: Trafficking in Protected Species* (2016) 65.

³⁵ Kennaugh (n 32) 9; Vallianos (n 17) 10; V Dao Truong, V H Dang and C Michael Hall, 'The Marketplace Management of Illegal Elixirs: Illicit Consumption of Rhino Horn' (2016) 19(4) *Consumption Markets & Culture* 353, 362.

3. Other drivers

Alongside purchases relating to status or medicine, other drivers can operate either as subsidiary motivations, or as primary drivers in their own right. While it is impossible to list every conceivable demand driver, three are discussed often in the research: cultural tradition and religion; food and necessity; and speculation.

3.1. Cultural tradition and religion

Links to cultural tradition and religion are often ingrained in custom. For example, the manufacturing and wearing of Shahtoosh shawls has persisted for centuries.³⁶ Made from the wool of the Tibetan antelope, or chiru, demand for these shawls placed strain on the chiru population sufficient to endanger the species. In Yemen, the use of jambiyas, a traditional dagger used to demonstrate masculinity, generated demand for rhino horn to use as the dagger's handle. At a time, rhinoceros horn was so popular in Yemen that the country (then bifurcated into North Yemen and South Yemen) was the world's biggest rhinoceros horn market.³⁷

Despite these examples, purchases for cultural reasons rarely drive demand in isolation. In fact, transactions for cultural reasons may be overrepresented in research data: as cultural phenomena often operate as trends, consumers who purchase products ostensibly for reasons of cultural tradition may actually have little affinity with traditional culture, and actually purchase for statements of wealth or status.³⁸

3.2. Food and necessity

Not all consumption of trafficked wildlife is discretionary. There are many demographics, in regions across the world, that consume wildmeat because it is affordable (and alternatives are not) or other protein is

36 Saloni Gupta, *Contesting Conservation: Shahtoosh Trade and Forest Management in Jammu and Kashmir, India* (2018) 40.

37 Lucy Vigne and Esmond Bradley Martin, 'Closing Down the Illegal Trade in Rhino Horn in Yemen' (2001) 30 *Pachyderm* 87, 87 – 88.

38 USAID Wildlife Asia (n 7) 8.

unavailable. Such consumption is seen in parts of Asia, Central and West Africa, and South America.³⁹

The world's biggest importers of shark meat are Uruguay and Brazil, with the latter experiencing an 800 % increase in consumption from 2000 to 2011.⁴⁰ The meat is eaten because it is a cheap source of protein. Juvenile eels, called 'glass eels' due to their transparency during infancy, are one of the most trafficked animals in the world.⁴¹ Difficulties in captive harvest has forced suppliers to source specimens from the wild, placing significant strain on populations. As a result, the Japanese eel is now endangered, the European eel critically so.⁴²

3.3. Speculation

Speculation, the practice of purchasing non-perishable products in the expectation that future prices will increase, occurs but is not well studied in the context of wildlife. It occurs when products are anticipated to become rarer, more costly, and harder to acquire. Crucially, increasing awareness of a product's rarity may catalyse this purchasing behaviour. A 2010 paper outlines concerns that news of upcoming regulations 'may encourage risk-taking and increased speculation and stockpiling by illegal traders gambling on [the] possibility of windfall gains'.⁴³ The knowledge of impending difficulty in obtaining ivory has been considered a driver of consumption in China.⁴⁴ As of 2016, no demand reduction campaigns were known to specifically target this driving force, suggesting that it is either a comparatively minor reason for purchase, or the strategies to combat it are, as yet, unknown.⁴⁵

39 Drury (n 14) 247, 249; Felbab-Brown (n 28) 228; Vallianos et al (n 30) 16.

40 Vallianos et al (n 30) 16.

41 UNODC (n 34) 86.

42 Ibid.

43 Broad and Damania (n 10) 7–9.

44 GlobeScan (n 11) 19.

45 CITES, *Demand Reduction Strategies to Combat Illegal Trade in CITES-Listed Species*, Seventeenth meeting of the Conference of the Parties, Johannesburg 24 September–5 October 2016, CoP17 Doc 18.1, 3.

III. Strategies

Understanding the most common drivers of trafficked wildlife purchases allows demand reduction strategies to be better tailored towards consumption behaviour. This is infinitely more difficult than it appears, and strategies must take into account the inherent difficulty in effecting behavioural change. Not only do drivers of demand differ between individual consumers, reduction approaches must incorporate the ‘twin-track’ approach: behavioural change campaigns that address the infinite number of reasons people purchase, complemented by laws and regulation that are known and enforced.⁴⁶ Where simply ending the purchasing behaviour cannot be achieved, sustainable substitutes must be available to facilitate a transition away from consuming trafficked wildlife.

1. Behavioural change campaigns

Demand reduction strategies are, in essence, behavioural change campaigns. The focus here is on changing behaviour through awareness, education, and community initiatives. Awareness campaigns and education campaigns are often not distinguished.⁴⁷ Awareness campaigns should be considered as the first step in shedding light on an issue, while education campaigns seek to inform consumers of the threat their consumption poses to wildlife. Community initiatives are additional processes that pursue behavioural change through provoked shifts in societal standards.

1.1. Awareness campaigns

For a demand reduction strategy to be successful, there must be a baseline understanding that a problem exists. To that end, awareness campaigns are a necessary, though alone insufficient, element of a wider approach to behavioural change. For example, ignorance about the existential threat to elephants needs addressing, but knowledge of their status as an

⁴⁶ Burgess et al (n 1) 17.

⁴⁷ See, for example, Kenneth Wallen and Elizabeth F Daut, ‘The Challenge and Opportunity of Behaviour Change Methods and Frameworks to Reduce Demand for Illegal Wildlife’ (2018) 26 *Nature Conservation* 55, 58.

endangered species may not dissuade a buyer from purchasing a small ivory curio, if they believe the purchase will have little impact on the species' future.

Researched examples include: a misunderstanding of the origins of ivory; an ignorance that pangolins are regularly poached; an unawareness about the laws prohibiting rhinoceros horn consumption; and accidental consumption of shark meat sold as alternative products.⁴⁸ It also not understood why demand for pangolin in the United States, the world's second biggest market, is so strong.⁴⁹

A 2015 study carried out by USAID found that awareness of wildlife issues in China, and Southeast and Eastern Asia is low.⁵⁰ Anthropocentrism is a pervasive view, with wildlife placed as existing to serve human needs; the more utilitarian the respondent's attitude towards animals, the more likely the respondent to purchase trafficked wildlife.⁵¹ In some cases, there is even a negative image of animals. They are seen to be a danger to local humans, and need to be killed.⁵² This view is supplemented by the erroneous belief that trafficked species are in no danger of becoming extinct, due to a perceived abundance of animals in source countries.⁵³

Without suggesting that effective awareness campaigns will wholly eliminate trafficking of wildlife, it is important for consumers to have an accurate understanding of the origin of the products they purchase. Ignorance of these facts may preclude consumers from making conscious informed decisions about whether to consume trafficked wildlife.

1.2. Education campaigns

Education campaigns go further than merely spreading information of environmental issues: they provide reasons why the problem is a problem,

48 Christina Vallianos, *Ivory Demand in Thailand* (2015) 5; Vallianos (n 17) 20; Kennaugh (n 32) 13; Hugo Bornatowski et al, "Buying a Pig in a Poke": The Problem of Elasmobranch Meat Consumption in Southern Brazil' (2015) 6(1) *Ethnobiology Letters* 196, 197.

49 See, for example, Heinrich et al (n 16) 10, 25.

50 USAID Wildlife Asia (n 7) 15.

51 Felbab-Brown (n 28) 222; GlobeScan (n 11) 7.

52 GlobeScan (n 11) 7.

53 Ibid 23.

either for the survival of the species, or for the broader impact to the environment and even humans themselves. They also serve to dispel myths about the nature of the product. For example, an awareness campaign may highlight the plight of the rhinoceros species in the face of poaching; an education program will inform that rhinoceros horn has no medicinal value and is therefore a waste of money.⁵⁴

The focus of an educational campaign can be sometimes confused by differing opinions about what changes human behaviour. For example, some argue that appealing to altruism is not an effective strategy because selfish impulses prevail over self-control.⁵⁵ Instead it is suggested that campaigns are most effective when individuals feel there is a direct threat to their own safety, health, or wellbeing, and an opportunity to avoid that threat is available to them.⁵⁶

One example of a such a threat was conveyed in a WildAid campaign to reduce shark fin consumption in China. Methylmercury, a neurotoxic compound highly poisonous to humans, is found in shark meat. Low-level heterotrophs metabolise mercury pollution into methylmercury, and through a process called bioaccumulation, the compound builds up in the flesh of sharks to a level dangerous to humans.⁵⁷ This health threat formed part of the WildAid campaign, and was listed by one in three consumers as a reason to avoid shark fin.⁵⁸

Research led by Gayle Burgess et al following China's ban on the trade of ivory found that support for government regulation was predicated on the knowledge that elephant populations are in decline due to poaching, and that the killing of adult elephants impair the survival chances of baby elephants.⁵⁹ While some argue that campaign messaging should be positive, and not seek to shock the targeted audience, overall it was images of poached elephants that were considered by Chinese viewers to be the most 'impressive' elements of the campaign against ivory use.⁶⁰

⁵⁴ See, for example, Viet Nam CITES Management Authority (n 30) 5.

⁵⁵ Felbab-Brown (n 28) 224.

⁵⁶ Ibid 225.

⁵⁷ Vallianos et al (n 30) 18.

⁵⁸ S Whitcraft et al, *Evidence of Declines in Shark Fin Demand, China* (2014) 27.

⁵⁹ Meijer et al (n 9) 11.

⁶⁰ Burgess (n 12) 69; Meijer et al (n 9) 61.

For buyers of ivory in the so-called ‘diehard’ category, however, it was celebrities such as basketball star Yao Ming and actress Li Bingbing, that were most influential. Celebrities may therefore appeal to consumers concerned with their social perception. Other research suggests that celebrities should only be used as a communication tool where appropriate, in order to prevent consumers succumbing to celebrity fatigue.⁶¹

Overall, the studies referred to highlight that a ‘one-size-fits-all’ message is impossible to achieve. Ultimately, it is vital to remember that campaign messaging appropriate for one demographic may not be appropriate for its target: the consumer. It is the consumer, and the messaging that works best at changing their behaviour, that should be the focus of any demand reduction campaign.

1.3. Community initiatives

Community initiatives involve a community-based program incorporating awareness, education, and prevention, targeting societal pressures to conform.⁶² This is an avenue that does not appear to have been well explored. Potential reasons for this may be that such initiatives fall outside established demand reduction strategies, and there is a dearth of research from which to build upon. There are very few studies on general community-based prevention in Asia, and even fewer relating to the reduction of trafficked wildlife consumption.⁶³

Some examples do exist. The Animals Asia Foundation has entered classrooms in Vietnam to educate children on the cruelty of bear bile farming; the Indonesian Council of Ulema declared a *fatwa* — a religious ruling — against wildlife trafficking; and various other religious organisations have voiced concerns.⁶⁴

61 See, for example, Whitcraft et al (n 58) 23–24; Meijer et al (n 9) 61; Elaine Jeffreys, ‘Translocal Celebrity Activism: Shark-Protection Campaigns in Mainland China’ (2016) 10(6) *Environmental Communication* 763, 764; Elizabeth Duthie et al, ‘The Effectiveness of Celebrities in Conservation Marketing’ (2017) 12(7) *PLoS ONE*: e0180027 [s.p.].

62 See, for example, Wallen and Daut (n 47) 61.

63 UNODC, *International Standards on Drug Use Prevention* (2015) 27.

64 Julie Ayling, *A regulatory approach to demand reduction in the illegal wildlife market*, RegNet Research Papers No 82 (2015) 12.

One example of a strategy that broadened its focus beyond the immediate consumer demographic, is the partnership between the Humane Society International and the Vietnam CITES Management Authority to reduce rhino horn consumption in Vietnam. Outside the campaign's target audience, the strategy included working with children, women's associations, university students, businesses, and the Vietnam Union of Science and Technology Associations.⁶⁵ Not all of these groups contribute to demand for rhino horn. Instead, workshops and education programs targeted a broad cross-section of the community in an attempt to shift cultural and societal norms, such that anti-consumption behaviour can be reinforced by these groups. For example, one animated video about rhino horn, made for children, was viewed by more than 2.6 million people.⁶⁶ Of those that viewed the cartoon, 100% said they would not consider purchasing rhino horn, a promising result even if a small proportion do change their intentions as they age.⁶⁷

This use of education programs in the school classroom is a practice that should be explored further. It involves educating school-aged children about the effects of trafficking on species survival, and gives them tools to avoid consuming such products, either by negotiating their way out of peer pressure, or by enhancing a culture where the consumption of trafficked animals is looked down upon. While the results of such an investment may not be realised immediately, the United Nations Office on Drugs and Crime has found that such campaigns enhance critical thinking, which may increase the effectiveness of education and awareness campaigns as children enter consumption demographics.⁶⁸

2. Criminalisation, regulation, and enforcement

As the counterpart to behavioural change campaigns, criminalisation is a necessary step in fighting wildlife trafficking.⁶⁹ Laws ought to ban egregious forms of wildlife exploitation, and regulations should provide a

⁶⁵ Vietnam, CITES Management Authority (n 30) 3 – 5.

⁶⁶ Ibid 6.

⁶⁷ Ibid.

⁶⁸ UNODC, *World Drug Report 2015* (2015) 24.

⁶⁹ Anita Sundari Akella and Crawford Allan, *Dismantling Wildlife Crime: Executive Summary* (November 2012) 6.

framework within which trade can continue sustainably. To be effective, bans must be also be enforced and seen to be enforced. There must also be widespread awareness by the public of the legislative requirements expected of them.

The enforcement of existing laws remains a problem in a number of markets, including countries where seizure rates are low despite being a known trafficking route, such as Laos in the trafficking of ivory and pangolin.⁷⁰ Restaurants in Vietnam rarely face tough penalties for serving pangolin meat and there is a pervasive view that the risk of arrest for buying rhino horn in China is average to low.⁷¹ Stronger enforcement of laws serves as both a general deterrence to the wider community, and a specific deterrence to potential customers. It may also lead to collection of better data about source countries of trafficked wildlife, in turn facilitating better research into these regions and allowing more effective demand reduction campaigns.

Paradoxically, one study in China found that 67 % of those likely to purchase ivory actually support the recent ban on trade, saying that even stronger regulations would prevent them from purchasing.⁷² This response was found in the world's five biggest ivory markets: China, the United States, Philippines, Vietnam, and Thailand. Many also support an international treaty banning the ivory trade.⁷³ Another example of this attitude can be seen in the consumption of shark fin. While it remains a 'popular' dish at weddings and events, many do not wish to consume it, and only do so due to pressure from their peers.⁷⁴

Awareness of bans is another issue. Despite having some of the most severe sentencing for wildlife crimes, one quarter of surveyed respondents in China were unaware that consuming rhino horn is illegal, a figure that pales in comparison to Vietnam, where an estimated 90 % of respondents were unaware of the laws against rhino horn trade in their country.⁷⁵ While regulators must understand legislative requirements and the punishment

⁷⁰ Lucy Vigne and Esmond Martin, *The Ivory of Laos: Now the Fastest Growing in the World* (2017) 7; Heinrich et al (n 16) 28.

⁷¹ Vallianos (n 17) 22; Kennaugh (n 32) 13.

⁷² GlobeScan (n 11) 19.

⁷³ Ibid 20.

⁷⁴ Felbab-Brown (n 28) 222.

⁷⁵ Kennaugh (n 32) 13; Truong, Dang and Hall (n 35) 362.

for non-compliance, the general public too must have a clear understanding of wildlife trafficking laws, and the consequences of breaching them.⁷⁶

Like awareness campaigns, merely enacting legislation or implementing regulatory frameworks in isolation is insufficient to entirely reduce demand for trafficked wildlife, and even those who advocate for greater focus on regulation accept that enforcement alone is not enough to reduce demand.⁷⁷ To be successful, they must complement other strategies, such as behavioural change campaigns, and an overall reduction of demand may also make the enforcement of bans an easier task.⁷⁸

3. Substitution

Behavioural change campaigns and criminalisation can be supported by the availability of sustainable alternatives to trafficked wildlife. This may be in the form of a legal, sustainable option, such as captive bred wildlife, or, where the product is for practical use, an affordable, fit-for-purpose alternative.⁷⁹ Substituting trafficked wildlife for sustainable alternatives has, in some cases, proven to be an effective tool in the fight against trafficked wildlife consumption, though studies into their potential success are scarce.⁸⁰

The alternative must be sustainable, and should not replace one environmental concern with another. Perhaps the most glaring example of an unsuitable substitute is the plight of the saiga antelope. The market for rhinoceros horn in Japan, at one time one of the biggest in the world, is now negligible.⁸¹ This reduction was driven, in part, by the use of saiga antelope horn as a substitute to rhinoceros horn for medicinal use. The

76 UNODC (n 26) 165.

77 Elizabeth L Bennett, 'Another Inconvenient Truth: The Failure of Enforcement Systems to Save Charismatic Species' (2011) 45(4) *Oryx* 476, 476 – 477; Ayling (n 64) 15.

78 Akella and Allan (n 69) 6; Felbab-Brown (n 28) 219.

79 See, for example, Tamsin E Lee and David L Roberts, 'Devaluing Rhino Horn as a Theoretical Game' (2016) 337 *Ecological Modelling* 73, 78.

80 Jacob Phelps, L Roman Carrasco and Edward L Webb, 'A Framework for Assessing Supply-Side Wildlife Conservation' (2014) 28(1) *Conservation Biology* 244, 245; cited in A Nuno et al, 'Understanding Implications of Consumer Behaviour for Wildlife Farming and Sustainable Wildlife Trade' (2017) 32(2) *Conservation Biology* 390, 391.

81 Tomomi Kitade and Ayako Toko, *Setting Suns: The Historical Decline of Ivory and Rhino Horn Markets in Japan*, TRAFFIC Report (April 2016) 2.

strain on the antelope population was so great, it is now considered to be critically endangered.⁸² Another product that is unable to be marketed as a suitable alternative is jade. It may be a fitting replacement for ivory, but human rights abuses involved in its extraction make it inappropriate to market the mineral as such.⁸³

Alternate products are also less likely to be pursued when the trafficked wildlife is consumed because it is wild. Bear bile is one of many examples. The active ingredient, ursodeoxycholic acid, has been artificially replicated in laboratories, yet users of bear bile favour products from wild bears, even preferring them over captive bears.⁸⁴ Other studies have demonstrated this mindset towards tiger products and wildmeat such as turtle.⁸⁵ Attempts in Africa to replace consumption of wildmeat with consumption of chicken and goat meat have also been unsuccessful, with the change in eating habits considered by consumers to be too drastic.⁸⁶

In many cases, alternative products will not only need to be sustainable, they may also need to provide economic incentives to suppliers. Where a retailer has an option to sell either trafficked wildlife or a sustainable alternative, the most profitable product is likely to be chosen in the absence of harsh penalties or social exclusion. Where trafficked products are cheaper to source, they may also be cheaper for the final consumer than a sustainable alternative.⁸⁷ This should not be confused with an effort to alleviate poverty as a strategy to reduce demand, as research has shown that such a strategy, while perhaps effective in general conservation, is unlikely to deter wildlife crime and consumption.⁸⁸

82 Ibid 23 – 24.

83 Burgess (n 12) 66.

84 Dutton, Hepburn and Macdonald (n 33) [s.p.]; Sung and Fong (n 15) 223.

85 Brian Gratwicke et al, 'Attitudes Toward Consumption and Conservation of Tigers in China' (2008) 3 (7) *PLoS ONE*: e2544 [s.p.]; Nuno et al (n 80) 398.

86 Felbab-Brown (n 28) 228.

87 See, for example, Drury (n 14) 255.

88 Akella and Allan (n 69) 6.

IV. Successes

Demand reduction campaigns that find success are either implemented alongside or highlight existing government laws and regulations; the so-called ‘twin-track approach’. More recent examples of success can be attributed to in-depth pre-campaign research, a targeted campaign roll-out, and adaptive campaign monitoring. The following three campaigns illustrate how effective these components can be when seeking success.

1. Shark fin in China

In 2006, before a demand reduction campaign led by WildAid commenced, Chinese consumption of shark fin was ubiquitous. So too was ignorance; a translation quirk meant that only one-quarter of the population knew that shark fin soup came from sharks, and nearly 20 % of people thought shark fins grew back.⁸⁹ Over the next decade, consumption of shark fin fell by 80 %, while shark fin imports and sales declined by 81 %.⁹⁰ This is a remarkable achievement. The decline was accompanied by a widespread advertising campaign featuring prominent celebrities, a Chinese governmental ban on shark fin consumption at state banquets, and extensive media coverage.

Success can be largely attributed to the considered approach of WildAid’s demand reduction campaign. Beginning in 2006, the campaign conducted preliminary research which outlined a significant awareness gap of the origin of shark fins, and the brutal nature of shark finning. Those findings shaped a substantial marketing campaign featuring some of China’s most beloved celebrities, including basketballer Yao Ming, actor Jackie Chan, and footballer David Beckham. The campaign sought to turn public attitude against shark fin soup using a simple message: ‘When the buying stops, the killing can too’, a mantra seeking to highlight the cruelty of shark fin consumption.

89 Whitcraft et al (n 58) 23.

90 Vallianos et al (n 30) 7.

The campaign was intensified during the 2008 Beijing Olympics, and was ultimately seen by some 80 % of its targeted audience.⁹¹ A 2010 survey revealed that the campaign was recalled by more than half of survey respondents, and more than 80 % agreed that the campaign would deter them from consuming shark fin products.⁹² This follow-up research confirmed public support for the campaign, guiding its ultimate success.

2. Ivory in China

Because of its significant population and deep cultural affinity with the product, China is the world's largest consumer of ivory.⁹³ However, on 1 January 2018 a landmark ban on ivory trade was implemented by the Chinese government, providing an opportunity for a parallel demand reduction campaign.⁹⁴ As with the campaign to reduce shark fin consumption, pre-ban research was conducted, guiding the campaign roll-out, with post-campaign monitoring revealing further opportunities.

Pre-ban research into the ban's potential efficacy was promising: a report by the World Wildlife Fund revealed that more than 80 % of those interviewed agreed that the ban would deter them from buying ivory, and support for strict regulation was high.⁹⁵ This directed the campaign messaging to promote awareness of the ban, as well as attempting to provoke change in consumer behaviour.⁹⁶

As with the initiative to reduce shark fin consumption, WildAid conducted the campaign, and again utilised Yao Ming and Li Bingbing as the campaign faces.⁹⁷ Guided by the pre-ban research, the campaign aimed to promote awareness of the ban, alongside attempting to change consumer attitudes towards the ivory trade.⁹⁸ Again, the slogan 'when the buying

⁹¹ Ibid.

⁹² Whitcraft et al (n 58) 23.

⁹³ Meijer et al (n 9).

⁹⁴ [s.n.], 'China's Ivory Ban on Ivory Trade Comes Into Force', *BBC News online* (1 January 2018).

⁹⁵ GlobeScan (n 11) 10.

⁹⁶ Meijer et al (n 9) 53.

⁹⁷ Ibid 16.

⁹⁸ Ibid 53.

stops, the killing can too' featured in the campaign and, along with the use of celebrities, was regarded as its most memorable element.⁹⁹

A post-ban survey commissioned by WWF and TRAFFIC has found that the ban is having the effect that the pre-ban research had suggested: 83 % of respondents said the ban made them completely stop buying ivory.¹⁰⁰ Importantly, the post-ban research allowed GlobeScan, who carried out the research, to make a number of key recommendations based on the campaign outcomes. These included insights into messaging priorities, engagement of ivory 'rejectors' in future campaigns, and the targeting of millennials on social media and news applications.

3. Rhinoceros horn in Vietnam

The campaign to reduce the use of rhinoceros horn in Vietnam is in its relative infancy, but it represents best practice methods of formulating and implementing a strategy for behavioural change. Called the *Chi Initiative*, it is one of the largest ever demand reduction campaigns rolled out in Vietnam.¹⁰¹ The Initiative incorporates a five step process: behaviour identification, which highlights the purchasing behaviour requiring change; audience segmentation, which sections the campaign audience by, for example, attitudinal, psycho-social, and socio-economic factors; behaviour modelling, which builds on the first and second steps using empirical research to identify appropriate approaches to best achieve behavioural change; marketing framework, which develops the marketing strategy to include the most effective messages, messengers, and mechanisms; and finally, the implementation of the initiative, which is an adaptive approach, open to review and refinement as the campaign progresses.¹⁰²

Results are preliminary but encouraging. A 2016 study found that in the first three years of the campaign's rollout, the number of respondents that considered rhinoceros horn to be an effective medicine dropped by 45 %, which was the same percentage decrease in the people that self-reported

⁹⁹ Ibid 16.

¹⁰⁰ Ibid 15.

¹⁰¹ Susie Offord-Wooley, 'The Chi Initiative: A Behaviour Change Initiative to Reduce the Demand for Rhino Horn in Viet Nam' (2017) 58 *Pachyderm* 144, 144.

¹⁰² Ibid 146.

purchasing rhinoceros horn in the preceding 12 months.¹⁰³ The second phase of the initiative is now in motion and the *Chi Initiative* could prove to be the blueprint for future demand reduction campaigns.¹⁰⁴

V. Challenges

Demand reduction programs are never designed to fail, but good intentions alone do not guarantee success. Stimulating behavioural change of any kind is a complex task, and much energy is dedicated to reducing demand for trafficked wildlife. Still, some measures fall short of their ambition, often due to funding shortfalls, temporal constraints, or an underappreciation by reduction campaigners of the task.¹⁰⁵

This undertaking is made more difficult by deficiencies in current research, both in the nature of the research itself, and in the lack of coherence between data sets. Current areas for improvement include: more consistent research methodologies, reducing the potential for misleading or incomparable datasets; more comprehensive research studies that analyse all demographics; and a greater focus on analysing previous campaigns, building on success and learning from failure. As data collation, research strategies, and campaigns differ from species to species, and consumer to consumer, uniformity is difficult.

1. Inconsistent research methodologies

The vast number of international organisations, many of which are dedicated to the same cause, has contributed to research methodologies that are inconsistent and disparate, making comparisons between surveys difficult and confusing when formulating a demand reduction campaign.¹⁰⁶

If standardised best-practice research methodologies were developed, dissemination throughout the international community would make survey

¹⁰³ Viet Nam CITES Management Authority (n 30) 6.

¹⁰⁴ Offord-Wooley (n 101) 146.

¹⁰⁵ Akella and Allan (69) 11.

¹⁰⁶ Burgess et al (n 1) 12.

results more comparable. Pre-existing research could then be relied upon with greater confidence, increasing efficiency when devising reduction campaigns and allowing funds to be redirected towards other areas of demand reduction. States could also be encouraged to conduct their own research, using established methodologies for regular reporting, and allowing stakeholders to more readily identify current and potential issues.

2. Research gaps

Despite a number of organisations dedicating resources towards understanding consumers of trafficked wildlife, there are still a number of research gaps across every stage of the demand reduction process, including consumption drivers, effective campaign approaches, and post-strategy analysis.¹⁰⁷

Further research must be conducted in many consumption markets to better understand the demand drivers. For example, the United States conducts more demand reduction campaigns than anywhere else in the world, yet it is still unclear why it is the world's second biggest destination for pangolin.¹⁰⁸ It may be a transit hub, it may be a sizeable consumer, or it may be both. Such an understanding is vital to ensure the efficiency and effectiveness of any campaign to reduce demand.

Gaps in campaign marketing includes a lack of research into the effects of language in messaging, the most effective psychological tools to effect change, and a lack of reference to established behavioural science methods that may be utilised in reduction campaigns.¹⁰⁹ A recent toolkit designed to help fight trafficking of wildlife offered little in the way of guidance for demand reduction. Thus a dedicated manual to demand reduction is needed.¹¹⁰

¹⁰⁷ Ibid 20.

¹⁰⁸ See, for example, Heinrich et al (n 16) 25. Note these figures may be due to more effective law enforcement, resulting in more seizures.

¹⁰⁹ Burgess et al (n 1) 23, 29, 31.

¹¹⁰ USAID, *Measuring Impact – Measuring Efforts to Combat Wildlife Crime: A Toolkit for Improving Action and Accountability* (March 2017) 16 – 18.

3. Lack of campaign analysis

With a lack of funding often considered a reason for campaign failure, it is imperative that measures be as efficient and effective as possible.¹¹¹ This can be assisted by an examination of demand reduction measures both during and after they are implemented, however research reveals that post-campaign analysis is poor.

As at 2018, 236 demand reduction initiatives had been identified; of those, only one quarter reported outcomes, and less than 10 % reported impacts.¹¹² A further 46 campaigns were recognised, without any accompanying analysis at all.¹¹³ While some outcomes may not be observable for some time, and some impacts may be undetectable at all, this gap reveals both a current impediment and a future opportunity.

Reporting failures may not fill a researcher with pride, but consistent reporting of outcomes will help build a greater understanding of the strategy components that are vital to success, and those that are conducive to failure. Mistakes that can be avoided, should be, so that efficiencies and campaign success rate may be improved.

VI. Opportunities

1. Learning from best practice

There are fundamental best practices that each demand reduction campaign should try to achieve. They must be sensitive to market change and be suitably adaptive.¹¹⁴ They should be paired with effective bans, or regulation that is enforced, and is seen to be enforced.¹¹⁵ When tackling consumption of trafficked wildlife, parties to the CITES treaty have been urged to implement: demand reduction campaigns alongside regulations and law enforcement; in-depth research conducted using standard

¹¹¹ Akella and Allan (n 69) 11.

¹¹² Veríssimo and Wan (n 1) 6.

¹¹³ Ibid.

¹¹⁴ Akella and Allan (n 69) 7.

¹¹⁵ Ibid.

methodologies; evidence-based campaigns that target demand drivers; greater awareness campaigns to highlight the plight of trafficked species and the consequences of consuming them; and stronger legal and enforcement deterrents.¹¹⁶

Many publications have endorsed individual guidelines to follow when researching, formulating, and implementing demand reduction campaigns.¹¹⁷ While there are some variations, the body of research broadly recommends the following steps:

- (1) Conduct research. Preliminary and comprehensive research is vital. Establish the main drivers of the demand, noting that there may be multiple, and there is likely to be nuance between consumers at both an individual and demographic level.
- (2) Consider any influence or social pressure that facilitates consumption. These pressures will need to be accounted for when designing strategies, and can include social, familial, and societal pressures.
- (3) Segment the audience. Identify the most trusted messengers of that information, specific to the consuming demographic. For example, the increase in online wildlife trade, while challenging, presents the opportunity for more targeted advertising.¹¹⁸ Data collation may provide the chance to target consumers at each stage of the purchasing cycle: as they conduct initial research into the product; as they check and compare prices; or as they move to complete the transaction. To this end, social media campaigns could be used.¹¹⁹
- (4) Construct the marketing strategy. Ensure the strategy targets internal drivers and external influences. As brief examples, where medicine is a consumption driver, characterising purchases as a waste of money may be effective. If status is the predominant driver, campaigns that challenge the social acceptability of purchases may be effective.

116 CITES, Conference of the Parties, *Demand reduction strategies to combat illegal trade in CITES-listed species*, Resolution Conf. 17.4, 1.

117 See, for example, Burgess et al (n 1) 87 – 91; USAID (n 110) 16 – 18.

118 Sung and Fong (n 15) 220.

119 See, for example, Steven Greenfield and Diogo Veríssimo, 'To What Extent is Social Marketing Used in Demand Reduction Campaigns for Illegal Wildlife Products? Insights From Elephant Ivory and Rhino Horn' (2019) 25 (1) *Social Marketing Quarterly* 40, 43 – 48.

(5) Monitor the campaign. Once the campaign has begun, the strategy must remain sensitive to market changes and adjusting the strategy accordingly. This step should include follow-up research of consumer markets and audiences, to identify the campaign aspects that work, the effects that are being achieved, and the demographics that are not responding positively. The campaign can then be altered, slightly or radically, to ensure it can be as effective as possible.

2. Central data repository

While still a comparatively new field of research, there has been many resources dedicated towards understanding demand reduction. Still, finding suitable research outcomes is difficult and time consuming. One idea, raised briefly in a recent report by Burgess, prescribes a ‘centrally managed, definitive source of reliable data per taxon per country’.¹²⁰ Given the mismatched nature of available research, such a repository would well serve those that agitate to reduce demand.

A website could be established incorporating this. It could provide resources for species-specific reduction strategies, with a database of research studies that could be input to have a uniform dataset. For example, under ‘ivory’, data could be separated into demographic (‘consumer’), consumption behaviour (‘driver’), and reduction approach (‘strategy’). Algorithms could divide demographics into customisable parameters, such as age, sex, and location, and data could be viewed either as an average of all available and reputable research, or as a link to individual articles that have conducted research into ivory consumption and behaviours. The issue of copyright could perhaps be overcome through a subscription service that provided payment to the publisher each time an article is downloaded.

A separate section could analyse past campaigns. As demand reduction is a relatively new strategy, a recent study has collated every reduction effort since the turn of the century.¹²¹ As new campaigns are rolled out, their progress could be tracked under a section of ‘current campaigns’, which could then be updated as necessary. There would be an incentive for

¹²⁰ Burgess et al (n 1) 39.

¹²¹ Verissimo and Wan (n 1).

experts to examine previous campaigns, and opportunities for further research would present themselves.

Should this repository become a definitive source, it could serve to eliminate many of the current deficiencies that are regularly highlighted, and contribute to a unified view of demand reduction campaigns.

VII. Conclusion

Experience has shown that hampering the trafficking of wildlife is difficult, but it is not impossible. There are a number of committed stakeholders, demonstrated by the vast number of international organisations, that dedicate their existence to saving the animal kingdom's endangered species. A greater understanding of the drivers underpinning consumer behaviour is emerging, allowing campaigns to tailor strategies to address them. Despite some examples of improvement, there is still a need to increase awareness and enhance enforcement of existing laws to deter the purchasing of trafficked wildlife.

As the world's biggest market for trafficked wildlife, southeast Asia bears much responsibility in reducing demand. China has confirmed its commitment to protecting vulnerable fauna, exemplified by the ivory trade ban and efforts to reduce shark fin consumption, proving that change can be effected. China is not alone in its success. Japan, Vietnam, and Yemen, among others, have also demonstrated that well-founded, committed, enduring demand reduction campaigns can change consumer behaviour for the better.

Every new demand reduction campaign offers the chance to benefit from previous successes, or learn from past failures. To fully grasp this opportunity, research methodology must be consistent, research gaps must be filled, and campaigns must be analysed with more vigour. To facilitate this process, and remove inefficiencies, a central data repository should be created that can serve as a starting point for all demand reduction experts.

The size of the trafficked wildlife industry may appear insurmountable, but a burgeoning focus on reducing consumer demand is giving stakeholders a fighting chance. As each new campaign is employed, the body of knowledge grows, allowing future campaigns a greater chance at success.

Humans would do well to remember that they are not above nature, they are nature. The sooner that is internalised, the greater the chance of saving vulnerable wildlife. The natural order depends on it.

Bibliography

- Aisher, Alex, 'Scarcity, Alterity and Value: Decline of the Pangolin, the World's Most Trafficked Mammal' (2016) 14(4) *Conservation and Society* 317
- Akella, Anita Sundari and Allan Crawford, *Dismantling Wildlife Crime: Executive Summary*, Gland: WWF and TRAFFIC, November 2012
- Ayling, Julie, *A regulatory approach to demand reduction in the illegal wildlife market*, RegNet Research Papers No 82, Canberra, ACT: Australian National University, School of Regulation and Global Governance (RegNet), 2015
- Bennett, Elizabeth L, 'Another Inconvenient Truth: The Failure of Enforcement Systems to Save Charismatic Species' (2011) 45(4) *Oryx* 476
- Bornatowski, Hugo et al, "Buying a Pig in a Poke": The Problem of Elasmobranch Meat Consumption in Southern Brazil' (2015) 6(1) *Ethnobiology Letters* 196
- Broad, Steven and Richard Damania, *Competing demands: Understanding and addressing the socio-economic forces that work for and against tiger conservation*, Global Tiger Initiative Thematic & Working Paper Series, Washington, DC: Global Tiger Initiative, April 2010
- Burgess, Gayle et al, *Reducing Demand for Illegal Wildlife Products: Research Analysis on Strategies to Change Illegal Wildlife Product Consumer Behaviour*, London: UK Department for Environment, Food and Rural Affairs, September 2018
- Burgess, Gayle, 'Powers of Persuasion? Conservation Communications, Behavioural Change and Reducing Demand for Illegal Wildlife Products' (2016) 28(2) *TRAFFIC Bulletin* 65
- Challender, Daniel et al, 'Understanding Markets to Conserve Trade-Threatened Species in CITES' (2015) 187 *Biological Conservation* 249
- Challender, Daniel W S and Douglas C MacMillan, 'Poaching is More Than an Enforcement Problem' (2014) 7(5) *Conservation Letters* 484

- Challender, Daniel W S, Carly Waterman and Jonathan E M Baillie, *Scaling Up Pangolin Conservation: IUCN SSC Pangolin Specialist Group Conservation Action Plan*, London: IUCN SSC Pangolin Specialist Group, July 2014
- CITES, Conference of the Parties, *Demand reduction strategies to combat illegal trade in CITES-listed species*, Resolution Conf. 17.4
- CITES, *Demand Reduction Strategies to Combat Illegal Trade in CITES-Listed Species*, Seventeenth meeting of the Conference of the Parties, Johannesburg 24 September–5 October 2016, CoP17 Doc 18.1
- Clark, Colin W, *Mathematical Bioeconomics: The Mathematics of Conservation*, [s.l.]: Wiley, 3rd ed, 2010
- Courchamp, Franck et al, 'Rarity Value and Species Extinction: The Anthropogenic Allee Effect' (2006) 4(12) *PLoS ONE*: e415 [s.p.]
- Drury, Rebecca, 'Hungry for Success: Urban Consumer Demand for Wild Animal Products in Vietnam' (2011) 9(3) *Conservation and Society* 247
- Duthie, Elizabeth et al, 'The Effectiveness of Celebrities in Conservation Marketing' (2017) 12(7) *PLoS ONE*: e0180027 [s.p.]
- Dutton, Adam J, Cameron Hepburn and David W Macdonald, 'A Stated Preference into the Chinese Demand for Farmed v Wild Bear Bile' (2011) 6(7) *PLoS ONE*: e21243 [s.p.]
- Felbab-Brown, Vanda, *The Extinction Market: Wildlife Trafficking and How to Counter It*, Oxford: Oxford University Press, 2017
- Gault, Agnès and Yves Meinard and Franck Courchamp, 'Consumers' Taste for Rarity Drives Sturgeons to Extinction' (2008) 1 *Conservation Letters* 199
- GlobeScan, *Reducing Demand for Ivory: An International Study*, [s.l.]: National Geographic and GlobeScan, August 2015
- Gratwicke, Brian et al, 'Attitudes Toward Consumption and Conservation of Tigers in China' (2008) 3(7) *PLoS ONE*: e2544 [s.p.]
- Greenfield, Steven and Diogo Veríssimo, 'To What Extent is Social Marketing Used in Demand Reduction Campaigns for Illegal Wildlife Products? Insights From Elephant Ivory and Rhino Horn' (2019) 25(1) *Social Marketing Quarterly* 40
- Gupta, Saloni, *Contesting Conservation: Shahtoosh Trade and Forest Management in Jammu and Kashmir, India*, [s.l.]: Springer, 2018
- Harfoot, Michael et al, 'Unveiling the Patterns and Trends in 40 years of Global Trade in CITES-Listed Wildlife' (2018) 223 *Biological Conservation* 47

- Heinrich, Sarah et al, *The Global Trafficking of Pangolins: A Comprehensive Summary of Seizures and Trafficking Routes from 2010 – 2015*, TRAFFIC Report, Selangor: TRAFFIC Southeast Asia Regional Office, December 2017
- Holden, Matthew and Eve McDonald-Madden, 'High Prices for Rare Species Can Drive Large Populations Extinct: The Anthropogenic Allee Effect Revisited' (2017) 429 *Journal of Theoretical Biology* 170
- Jeffreys, Elaine, 'Translocal Celebrity Activism: Shark-Protection Campaigns in Mainland China' (2016) 10(6) *Environmental Communication* 763
- Kennaugh, Alex, *Rhino Rage: What is Driving Illegal Consumer Demand for Rhino Horn*, Washington, DC: National Resources Defense Council, March 2016
- Kitade, Tomomi and Ayako Toko, *Setting Suns: The Historical Decline of Ivory and Rhino Horn Markets in Japan*, TRAFFIC Report, Tokyo: TRAFFIC Japan Office, April 2016
- Lee, Tamsin E and David L Roberts, 'Devaluing Rhino Horn as a Theoretical Game' (2016) 337 *Ecological Modelling* 73
- Lyons, Jessica A and Daniel J D Natush, 'Effects of Consumer Preferences for Rarity on the Harvest of Wild Populations Within a Species' (2013) 93 *Ecological Economics* 278
- Meijer, Wander et al, *Demand under the Ban: China Ivory Consumption Post-Ban 2018*, Beijing: TRAFFIC and WWF, September 2018
- Nuno, A et al, 'Understanding Implications of Consumer Behavior for Wildlife Farming and Sustainable Wildlife Trade' (2017) 32(2) *Conservation Biology* 390
- Offord-Wooley, Susie, 'The Chi Initiative: A Behaviour Change Initiative to Reduce the Demand for Rhino Horn in Viet Nam' (2017) 58 *Pachyderm* 144
- Pangau-Adam, Margaretha and Richard Noske and Michael Muehlenberg, 'Wildmeat or Bushmeat? Subsistence Hunting and Commercial Harvesting in Papua (West New Guinea), Indonesia' (2012) 40 *Human Ecology* 611
- Phelps, Jacob, L Roman Carrasco and Edward L Webb, 'A Framework for Assessing Supply-Side Wildlife Conservation' (2014) 28(1) *Conservation Biology* 244
- Sung, Yik-Hei and Johnathon J Fong, 'Assessing Consumer Trends and Illegal Activity by Monitoring the Online Wildlife Trade' (2018) 227 *Biological Conservation* 219
- Thomas-Walters, Laura A, *Mapping Motivations: Combatting consumption of illegal wildlife in Viet Nam*, Hanoi,: TRAFFIC, December 2017

- Truong, V Dao, V H Dang and C Michael Hall, 'The Marketplace Management of Illegal Elixirs: Illicit Consumption of Rhino Horn' (2016) 19(4) *Consumption Markets & Culture* 353
- UN General Assembly, *Tackling Illicit Trafficking in Wildlife*, UN Doc A/RES/69/314 (19 August 2015)
- UN General Assembly, *Tackling Illicit Trafficking in Wildlife*, UN Doc A/71/L.88 (5 September 2017)
- UNODC, *International Standards on Drug Use Prevention*, Vienna: United Nations, 2015
- UNODC, *Wildlife and Forest Crime Analytic Toolkit*, New York, NY: United Nations, rev ed, 2012
- UNODC, *World Drug Report 2015*, New York, NY: United Nations,
- UNODC, *World Wildlife Crime Report: Trafficking in Protected Species*, New York, NY: United Nations, 2016
- USAID, *Measuring Impact – Measuring Efforts to Combat Wildlife Crime: A Toolkit for Improving Action and Accountability*, Washinton, DC: USAID, March 2017
- USAID Wildlife Asia, *What Drives Demand for Wildlife? A Situation Analysis of Consumer Demand for Wildlife Parts and Products in China, Thailand and Vietnam based on a Literature Review*, Situation Analysis, [s.l.]: USAID/RDMA, 2017
- Vallianos, Christina et al, *Sharks in Crisis: Evidence of Positive Behavioural Change in China as New Threats Emerge*, San Francisco, CA: WildAid, 2018
- Vallianos, Christina, *Ivory Demand in Thailand*, San Francisco, CA: WildAid, 2015
- Vallianos, Christina, *Pangolins on the Brink*, San Francisco, CA: WildAid, 2017
- Veríssimo, Diogo and Anita K Y Wan, 'Characterizing efforts to reduce demand for wildlife products' (2019) 33(3) *Conservation Biology* 623
- Viet Nam CITES Management Authority, *Viet Nam Rhino Horn Demand Reduction Campaign: Campaign Report 2013 – 2016*, Hanoi and Washington, DC: Viet Nam CITES Management Authority and Humane Society International, 2017
- Vigne, Lucy and Esmond Bradley Martin, 'Closing Down the Illegal Trade in Rhino Horn in Yemen' (2001) 30 *Pachyderm* 87
- Vigne, Lucy and Esmond Martin, *The Ivory of Laos: Now the Fastest Growing in the World*, Nairobi: Save the Elephants, 2017

Wallen, Kenneth and Elizabeth F Daut, 'The Challenge and Opportunity of Behaviour Change Methods and Frameworks to Reduce Demand for Illegal Wildlife' (2018) 26 *Nature Conservation* 55

Whitcraft, S et al, *Evidence of Declines in Shark Fin Demand, China*, San Francisco, CA: WildAid, 2014

[s.n.], 'China's Ivory Ban on Ivory Trade Comes Into Force', *BBC News online* (1 January 2018) <<https://www.bbc.com/news/world-asia-china-42532017>>

Chapter Five

International Law Relating to Wildlife Trafficking: An Overview

JOSEPH LELLIOTT

This chapter provides an overview of international law relevant to wildlife trafficking. It explains that, while no single instrument comprehensively addresses such trafficking, a range of international treaties and other materials contain rules, obligations, and principles that relate to its prevention and suppression. These come from areas of law including environmental protection and conservation, international trade, organised crime and corruption, and animal welfare. This chapter addresses each of these areas in turn and highlights the growing attention given to wildlife trafficking at the international level.

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I. Introduction

The international legal framework addresses wildlife trafficking in a fragmentary manner. No single instrument contains specific measures

aimed at the prevention and suppression of wildlife trafficking.¹ Instead, international obligations and principles relevant to wildlife trafficking come from several areas of international law, including international trade, environmental protection and conservation, animal welfare, and organised crime and corruption. These are the principal focus of this chapter.

Of the various relevant international instruments, the *Convention on International Trade in Endangered Species of Wild Flora and Fauna* (CITES)² has assumed a central role. CITES provides a framework regulating the international trade in wild flora and fauna, creating rules for how such trade must be carried out and mandating suppression of trade that violates its provisions.³ While CITES does not specifically address wildlife trafficking, and does not require States Parties to impose criminal sanctions on those breaching its provisions, it nonetheless exerts substantial influence on domestic laws targeting such trafficking.⁴

Several multilateral treaties concerning environmental protection and conservation are also important in combatting wildlife trafficking.⁵ This includes the *Convention on Biological Diversity*,⁶ the *Convention Concerning the Protection of the World Cultural and Natural Heritage*,⁷ and the *Convention on the Conservation of Migratory Species of Wild Animals*.⁸ Each of these treaties, through their administrative bodies, have sought to grow their cooperation with CITES to further efforts to combat wildlife trafficking.

CITES, together with the various environmental treaties, lacks mechanisms to criminalise wildlife trafficking. This deficit is addressed, albeit partially and indirectly, through the *United Nations Convention against Transnational Organized Crime* (UNTOC) and the *United Nations Convention against*

1 Lorraine Elliott, 'Cooperation on Transnational Environmental Crime: Institutional Complexity Matters' (2017) 26(2) *Review of European Community and International Environmental Law* 107, 110; Lydia Slobodan, *Addressing Transnational Wildlife Crime through a Protocol to the UN Convention against Transnational Organized Crime: A Scoping Paper* (13 October 2014) 7.

2 Opened for signature 3 March 1973, 993 UNTS 243 (entered into force 1 July 1975).

3 CITES, art VIII(1).

4 UNODC, *World Wildlife Crime Report: Trafficking in Protected Species* (2016) 23.

5 Slobodan (n 1) 8–9.

6 Opened for signature 5 June 1992, 1760 UNTS 79 (entered into force 29 December 1993).

7 Opened for signature 16 November 1972, 1037 UNTS 151 (entered into force 17 December 1975).

8 Opened for signature 23 June 1979, 1651 UNTS 333 (entered into force 1 November 1983).

*Corruption (UNCAC).*⁹ These Conventions set out international frameworks to enhance cooperation between States Parties in combatting transnational organised crime and corruption. While neither Convention expressly addresses wildlife trafficking, each contains provisions to facilitate cooperation and criminalise certain conduct (such as obstruction of justice) that can be applied to offenders and organisations that traffic wildlife.

This chapter provides an overview of the international legal framework relevant to wildlife trafficking. It gives an overview of the scope and application of the treaty instruments identified above and places them in the context of combatting wildlife trafficking (Parts II through IV). The chapter further outlines some developing international principles concerning animal welfare and their potential contribution to this framework (Part V). It should be noted that there are many elements of international law potentially applicable to wildlife trafficking; it is beyond the scope of this Chapter to address all of them. In particular, regional and bilateral instruments and initiatives are not examined.

II. Environmental protection and conservation

Since the early 1970s, international environmental law has gradually expanded with the creation of a wide range of multilateral agreements. While these deal with a plethora of issues relevant to environmental protection and conservation, including hazardous waste,¹⁰ atmospheric policy,¹¹ and noise pollution,¹² a significant subset address, either specifically or incidentally, the protection of wildlife. Many endangered

9 Opened for signature 15 December 2000, 2225 UNTS 209 (entered into force 29 September 2003); opened for signature 31 October 2003, 2349 UNTS 41 (entered into force 14 December 2005).

10 *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*, opened for signature 22 March 1989, 1673 UNTS 57 (entered into force 5 May 1992).

11 *Convention on Long-Range Transboundary Air Pollution*, opened for signature 13 November 1979, 18 ILM 1442 (entered into force 16 March 1983).

12 *Convention (No. 148) concerning the protection of workers against occupational hazards in the working environment due to air pollution, noise and vibration*, opened for signature 20 June 1977, 1141 UNTS 106 (entered into force 11 July 1979).

species are now covered by specific treaties, such as the *Convention for the Conservation of Antarctic Seals* and the *International Convention for the Regulation of Whaling*,¹³ as are a range of discrete environments, ecosystems, and types of animals.¹⁴ Many of these are regional instruments.¹⁵ The three principle international instruments dealing with wildlife conservation and, indirectly, wildlife trafficking are (in addition to *CITES*), the *Convention on Biological Diversity*, which promotes sustainable use of natural resources and components, together with equitable sharing of the benefits of genetic resources, for the purpose of conserving biological diversity, the *Convention Concerning the Protection of the World Cultural and Natural Heritage*,¹⁶ which protects cultural and natural heritage of 'outstanding value', and the *Convention on the Conservation of Migratory Species of Wild Animals*.¹⁷

1. World Heritage Convention

The *Convention Concerning the Protection of the World Cultural and Natural Heritage* (*World Heritage Convention*), which is discussed in much detail in Chapter Eight of this volume, was adopted within the General Conference of the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 1972 and, as of 1 December 2019, has 193 Parties. The Convention aims to establish 'an effective system of collective protection of the cultural and natural heritage of outstanding universal value,

13 Opened for signature 2 December 1946, 161 UNTS 72 (entered into force 10 November 1948).

14 See, for example, *Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat*, opened for signature 2 February 1971, 996 UNTS 245 (entered into force 21 December 1975); *Convention on Fishing and Conservation of the Living Resources of the High Seas*, opened for signature 29 April 1958, 559 UNTS 285 (entered into force 20 March 1966).

15 See, for example, *Convention on the Conservation of European Wildlife and Natural Habitats*, opened for signature 19 September 1979, ETS No 104 (entered into force 1 June 1982); *African Convention on the Conservation of Nature and Natural Resources*, opened for signature 15 September 1968, 1001 UNTS 3 (entered into force 9 October 1969).

16 Opened for signature 5 June 1992, 1760 UNTS 79 (entered into force 29 December 1993); opened for signature 16 November 1972, 1037 UNTS 151 (entered into force 17 December 1975).

17 Arie Trouwborst et al, 'International Wildlife Law: Understanding and Enhancing Its Role in Conservation' (2017) 67(9) *BioScience* 784, 785.

organized on a permanent basis and in accordance with modern scientific methods'.¹⁸ In accordance with this goal, the World Heritage Committee (which consists of representatives from 21 States Parties, elected by the Convention's General Assembly) considers cultural and natural properties of 'outstanding universal value', identified by States Parties, for protection through inclusion on the World Heritage List.¹⁹ The List contains all those properties decided to be World Heritage Sites by the Committee. Properties included on the List must be protected and preserved, though details of management are left to national legislation.²⁰ Where sites face 'serious and specific dangers', including disappearance, they may be placed on the separate List of World Heritage in Danger.²¹ Inclusion on this list highlights the need for conservation operations and increases awareness of threats and the need for countermeasures.

The *World Heritage Convention* plays a role in combatting wildlife trafficking insofar as it urges protection of certain natural properties and the species that contribute to their value. Relevantly, one criterion for designating a site as having 'outstanding universal value' is whether the site contains important natural habitats for threatened species. Over 60 per cent of natural and mixed heritage sites are selected based on this criterion.²² Indeed, the fact that a significant number of sites contain endangered plant and animal species, many of which are affected by wildlife trafficking and listed in *CITES's* Appendices, has prompted cooperation between the governing bodies of *CITES* and the *World Heritage Convention*.²³ Nonetheless, the Convention stops short of protecting species of plants and animals and does not mandate measures for protection and conservation, nor does it cover natural habitats that contain endangered species but are not of exceptional significance.²⁴ It only encourages

18 *World Heritage Convention*, preamble.

19 See generally Michael Bowman, Peter Davies, and Catherine Redgwell, *Lyster's International Wildlife Law* (2nd ed, 2010) 458–460.

20 *World Heritage Convention*, arts 4 and 5.

21 *Ibid* arts 11.

22 Dalberg Global Development Advisors, *Not for Sale: Halting the Illegal Trade of CITES Species from World Heritage Sites* (2017) 10.

23 See, for example, CITES, Conference of the Parties, *Cooperation between CITES and the World Heritage Convention*, Document 15.6, 18th meeting of the Conference of the Parties, Colombo (23 May–3 June 2019); Dalberg Global Development Advisors (n 22) 11.

24 Bowman, Davies, and Redgwell (n 19) 454.

protection of cultural and natural heritage and identifies various general measures which may be taken towards this goal.²⁵

2. Convention on Biological Diversity

As the principal treaty protecting biodiversity, the *Convention on Biological Diversity*, discussed further in Chapter Seven of this volume, addresses a wide range of subjects, including access to biotechnology, deforestation, and ecosystem management, among others. It was opened for signature in 1992 and, as of 1 December 2019, has 196 Parties. The Convention encourages the sustainable use of nature and equitable sharing of the benefits from use of genetic resources. It is 'concerned primarily with the management of national development choices that impact directly upon national resources'.²⁶

In the context of wildlife trafficking, the *Convention on Biological Diversity* emphasises conservation of natural habitats and ecosystems and the 'maintenance and recovery of viable populations of species in their natural surroundings'.²⁷ Article 8 of the Convention requires States Parties to 'as far as possible and appropriate', inter alia, 'legislate for the protection of threatened species and populations' and 'regulate activities determined to have significant adverse effect on biodiversity'. These actions may include measures to prevent and combat the trafficking of wildlife, including implementation of *CITES*. The Conference of the Parties to *CITES* has recommended that States strengthen their implementation of the *Convention of Biological Diversity* to enhance implementation of *CITES*.²⁸

Despite its wide adoption, the *Convention of Biological Diversity* has received criticism for having little practical effect; unlike *CITES* it 'does not protect particular species and, unlike the [*World Heritage Convention*], it does not protect particular places or areas. While the *Convention on Biological*

²⁵ *CITES*, art 5.

²⁶ Timothy Swanson, 'Why is There a Biodiversity Convention? The International Interest in Centralized Development Planning' (1999) 75(2) *International Affairs* 307, 308.

²⁷ *Convention on Biological Diversity*, art 2.

²⁸ *CITES*, Conference of the Parties, *Cooperation of CITES with other biodiversity-related conventions*, Resolution 16.4, 16th meeting of the Conference of the Parties, Bangkok (3 – 14 March 2013).

Diversity advocates the protection of natural habitats, it does not contain specific measures to achieve this end'.²⁹

3. Convention on Migratory Species

The *Convention on the Conservation of Migratory Species of Wild Animals* (*Convention on Migratory Species*) aims to conserve migratory animals and their habitats. It entered into force in November 1983 and, as of 1 December 2019, had 129 Parties.³⁰ Article II of the Convention sets out its fundamental principles, which include action 'to avoid any migratory species becoming endangered'. Migratory species are defined as in Article I(1)(a) to mean 'the entire population or any geographically separate part of the population of any species or lower taxon of wild animals, a significant proportion of whose members cyclically and predictably cross one or more national jurisdictional boundaries'.³¹ Species' range includes 'all the areas of land or water that a migratory species inhabits, stays in temporarily, crosses or overflies at any time on its normal migration route'.³²

The *Convention on Migratory Species* takes a similar approach to *CITES*, insofar as it classifies the protection needs of species by listing them in one of two appendices. Appendix I includes species threatened with extinction throughout all or a substantial part of their migratory range. Appendix II, meanwhile, includes species that have an 'unfavourable conservation status and [...] require international agreements for their conservation and management', or would otherwise benefit from international cooperation.³³ For species listed in Appendix I, States Parties must adhere to various obligations, including conservation and restoration of habitats, prohibitions on the taking of such animals, and removal of barriers to their migration.³⁴ Appendix I-listed species may only be taken for a limited number of purposes, including scientific purposes, enhancing

²⁹ UNODC, *Wildlife and Forest Crime Analytic Toolkit* (rev ed, 2012) 19.

³⁰ CMS Secretariat, 'Parties and Range States' (Website, undated).

³¹ *Convention on Migratory Species*, art I(1)(a).

³² *Ibid* art I(1)(f).

³³ *Ibid* art IV(1).

³⁴ *Ibid* art III.

survival of the species, and for the needs of traditional subsistence users.³⁵ Conversely, the Convention does not oblige States Parties to undertake any specific actions with regard to species listed in Appendix II. States Parties should, however, endeavour to conclude subsidiary agreements ‘where these would benefit the species and should give priority to those species in an unfavourable conservation status’.³⁶ Such agreements stand separate to the Convention and, as such, may include non-party States. To date, there are seven agreements concluded under the *Convention on Migratory Species*.³⁷ A number of memoranda of understanding have also been created in relation to certain species.³⁸

The *Convention on Migratory Species* does not contain explicit provisions addressing wildlife trafficking. Nonetheless, many species covered by the Convention are affected by trafficking. For this reason, the administrative bodies of the Convention are devoting increasing attention to the issue. Resolutions of its Conference of the Parties, such as the *Resolution on the Prevention of Illegal Killing, Taking and Trade of Migratory Birds*,³⁹ as well as the establishment of a Joint Work Programme 2015 – 2020 with *CITES*, are both examples in this respect.

III. International trade

The *Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES)*, which is discussed in detail in Chapter Six of this volume, entered into force in 1975. Hailed at its inception as the ‘Magana

³⁵ Ibid art III(5).

³⁶ Ibid art IV(3).

³⁷ They include: the *Agreement on the Conservation of Albatrosses and Petrels*; *Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area*; *Agreement on the Conservation of African-Eurasian Migratory Waterbirds*; *Agreement on the Conservation of Small Cetaceans of the Baltic, North East Atlantic, Irish and North Seas*; *Agreement on the Conservation of Populations of European Bats*; *Agreement on the Conservation of Gorillas and their Habitats*; and the *Agreement on the Conservation of Seals in the Wadden Sea*.

³⁸ See CMS Secretariat, ‘Agreements’ (Website, undated); CMS Secretariat, ‘Memoranda of Understanding’ (Website, undated).

³⁹ UNEP, *Convention on Migratory Species, The Prevention of Illegal Killing, Taking and Trade of Migratory Birds*, UNEP Doc UNEP/CMS/Resolution 11.16 (4 – 9 November 2014).

Carta for Wildlife',⁴⁰ the Convention is the principal international instrument regulating and restricting international trade in plant and animal species, with the aim of ensuring that their survival is not threatened by such trade. The Convention places various restrictions and requirements on legal international trade, primarily through a system of permits and certificates which correspond to three lists of protected species in the Convention's Appendices. In this way, *CITES* enables States Parties to 'reciprocally protect one another's species according to a common set of rules'.⁴¹

While *CITES* does not deal directly with illegal trade (and thus wildlife trafficking), it does require States Parties to prohibit trade that occurs in contravention of its rules. These prohibitions are not required to take the form of criminal offences, nor is there a requirement to make trade in violation of the Convention illegal, *per se*.⁴² Legislative inconsistencies between States, as well as inadequate enforcement, also frustrate efforts to protect trafficked species.⁴³ Despite these limitations, *CITES* remains the only international instrument mandating some form of penalisation of illegal trade in protected species.⁴⁴

The administrative organs of *CITES*, particularly its Secretariat and the Conference of the Parties,⁴⁵ have focused significant attention on combatting wildlife trafficking and continue to direct increasing resources to the effort. This is reflected in resolutions by the Conference of the Parties,⁴⁶ as well as the current draft of *CITES Strategic Vision: 2021–2030*, which

40 Peter H Sand, 'Whither CITES? The Evolution of a Treaty Regime in the Borderland of Trade and Environment' (1997) 1 *European Journal of International Law* 29, 34.

41 UNODC (n 4) 23.

42 Elliott (n 1) 112; Slobodan (n 1) 7.

43 Kimberley Graham, 'International Intent and Domestic Application of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES): The Case of the Ocelot (*Leopardus pardalis*)' (2017) 20(3–4) *Journal of International Wildlife Law & Policy* 253, 288.

44 Geoffrey Wandesforde-Smith, 'Looking for Law in All the Wrong Places? Dying Elephants, Evolving Treaties, and Empty Threats' (2016) 19(4) *Journal of International Wildlife Law & Policy* 365, 368.

45 See further Chapter Six of this volume.

46 CITES, Conference of the Parties, *CITES and livelihoods*, Resolution 16.6 (Rev. CoP18), 16th meeting of the Conference of the Parties, Bangkok (3–14 March 2013) (amended at the

recogni[ses] that effective enforcement is key to combatting the threat illegal and unsustainable trade poses to wild flora and fauna. Parties recognize the important role of CITES in global efforts to combat poaching and trafficking of species [...] to address both demand and supply of illegal wildlife products, and to tackle organized crime and poor governance, including corruption.⁴⁷

There has been a considerable increase in cooperation between *CITES* and the administrative bodies of other treaties, UN agencies, and non-governmental organisations (NGOs) to improve and coordinate responses to wildlife trafficking.⁴⁸ This has included the creation, in 2010, of the International Consortium on Combating Wildlife Crime (ICCWC), a collaboration between the *CITES* Secretariat, INTERPOL, the United Nations Office on Drugs and Crime (UNODC), the World Bank, and the World Customs Organization (WCA) that aims to support and strengthen criminal justice systems at national, regional, and international levels.⁴⁹

Notwithstanding these efforts, the role and effectiveness of *CITES* in combatting wildlife trafficking remains limited. As noted by UNODC, *CITES* ‘cannot credibly be extended into an agreement to suppress and control every aspect of illegal trade in wild fauna and flora’.⁵⁰ The majority of the world’s animal and plant species are not covered by the Convention. Furthermore, several widely traded species have become critically endangered or extinct despite their inclusion in *CITES*’ Appendix system. As a trade instrument first and foremost, *CITES* will always have a limited ability to protect endangered species from criminal activity.

17th and 18th meetings of the Conference of the Parties); *CITES*, Conference of the Parties, *Compliance and enforcement*, Resolution Conf. 11.3 (Rev. CoP18), 11th meeting of the Conference of the Parties, Gigiri (10 – 20 April 2000) (amended at the 13th, 14th, 15th, 16th, 17th, and 18th meetings of the Conference of the Parties).

47 *CITES*, Conference of the Parties, *CITES Strategic Vision: 2021 – 2030*, Resolution 18.3, 18th meeting of the Conference of the Parties, Geneva (17 – 28 August 2019) 5.

48 These efforts are noted by, inter alia, UN General Assembly, *Tackling Illicit Trafficking in Wildlife*, UN Doc A/RES/69/314 (19 August 2015); UN General Assembly, *Tackling Illicit Trafficking in Wildlife*, UN Doc A/RES/71/326 (28 September 2017).

49 See further John E Scanlon and Lisa Farroway, ‘Organisational Consortia: The International Consortium on Combating Wildlife Crime (ICCWC)’, in Grant Pink and Rob White (eds), *Environmental Crime and Collaborative State Intervention* (2016) 77, 91.

50 UNODC (n 29) 15.

IV. Animal welfare

Wildlife trafficking often has serious implications for the welfare for animals. In particular, methods used to kill and transport animals are often cruel and raise significant concerns. As a consequence, wildlife trafficking not only contravenes international rules on trade and the environment, it also commonly constitutes violations of animal welfare principles. These principles require the protection of animals from harm by traffickers and focus on the treatment and protection of individual animals.

Unlike the other areas of law discussed here, there is no specific international instrument creating obligations on States regarding animal welfare. Rather, general principles relevant to animal welfare have been proposed in non-binding instruments, such as the *UN Convention on Animal Health and Protection*.⁵¹ Welfare is addressed more extensively by activities of NGOs, such as the International Fund for Animal Welfare (IFAW).⁵²

There is some limited recognition of animal welfare in existing treaty law. This includes several provisions in the *Schedule to the International Convention for the Regulation of Whaling*⁵³ (which has a very limited scope) and *CITES*. In particular, rules in *CITES* deal with the welfare of animals and interactions with humans during the course of international trade.⁵⁴ Article 12(2)(c) of *CITES*, for example, mandates that the Secretariat prepare 'studies concerning standards for appropriate preparation and shipment of living specimens'. This requirement has led to the adoption of the *CITES Guidelines for the Non-Air Transport of Live Wild Animals and Plants* by the Conference of the Parties. Air transport of animals, meanwhile, is regulated by *Live Animals Regulations* of the International Air Transport Association (IATA).⁵⁵

51 See draft text at Global Animal Law Project, 'UN Convention on Animal Health and Protection (UNCAHP), First Pre-Draft of the Global Animal Law (GAL) Association' (Web page, 23 August 2018).

52 IFAW, 'About IFAW' (Web page, undated).

53 Opened for signature 2 December 1946, 161 UNTS 72 (entered into force 10 November 1948).

54 Stuart Harrop, 'Wild Animal Welfare in International Law: The Present Position and the Scope for Development' (2013) 4(4) *Global Policy* 381, 386.

55 CITES, Conference of the Parties, *Transport of live specimen*, Resolution Conf. 10.21 (Rev. CoP16), 10th meeting of the Conference of the Parties, Harare (9 – 20 June 1997) (amended at the 14th and 16th meetings of the Conference of the Parties).

CITES’ permit-granting requirements under Articles III, IV, and V also contain obligations relevant to welfare. Each of these Articles require States Parties to ensure that ‘any living specimen will be so prepared and shipped as to minimize the risk of injury, damage to health or cruel treatment’. Article VIII(4) further provides that illegally traded specimens that are confiscated are placed in rescue centres or other places appropriate or consistent with the Convention.⁵⁶ Nonetheless, *CITES* is not a vehicle for the advancement of general animal welfare; it is limited in scope to treatment during international trading activities.⁵⁷ Further, many States Parties to *CITES* fail to maintain effective records of proper treatment of specimens during transportation, including instances of mistreatment and mortality.⁵⁸

It should be noted that the environmental treaties discussed above, such as the *Convention on Biological Diversity* and the *Convention on Migratory Species*, deal with human interactions with animals through conservation and biodiversity perspectives aimed at preserving animals at the species level. Conversely, approaches centred on animal welfare seek the protection of individual animals irrespective of conservation and endangered status.⁵⁹ Nonetheless, a trend of ‘noticeable, if still tentative’, inclusion of animal welfare and protection principles is observable within more well-developed and sophisticated international rules dealing with biodiversity and conservation.⁶⁰ These developments, combined with contemporary initiatives aimed at recognising animal rights, point to the growing international importance of the welfare of individual animals.

56 *CITES*, Conference of the Parties, *Disposal of illegally traded and confiscated specimens of CITES-listed species*, Resolution Conf. 17.8, 17th meeting of the Conference of the Parties, Johannesburg (24 September–4 October 2016).

57 Michael Bowman, ‘Conflict or Compatibility? The Trade, Conservation and Animal Welfare Dimensions of *CITES*’ (1998) 1(1) *Journal of International Wildlife Law and Policy* 9, 28.

58 *Ibid* 60.

59 Harrop (n 54) 382.

60 Katie Sykes, ‘The Appeal to Science and the Formation of Global Animal Law’ (2016) 27(2) *European Journal of International Law* 497, 500–501.

V. Organised crime and corruption

Wildlife trafficking is one of many crime types that may be carried out transnationally and by organised criminal groups. Despite the proliferation of wildlife trafficking and other forms of environmental crime, as well as their significant impacts on communities and the natural world, Neil Boister observes that such crimes have not ‘occasioned a proportionate or coherent global response. Although calls have been made since the early 1990s for the development of a global transnational environmental crime prohibition regime, these calls have largely gone unheeded by a society of states wary of coordinating their efforts in this regard’.⁶¹ In the absence of specific instruments targeting wildlife trafficking specifically, the general frameworks set out in the *United Nations Convention against Transnational Organized Crime* (UNTOC) and the *United Nations Convention against Corruption* (UNCAC) concerning organised crime and corruption are of greatest application.

1. Convention against Transnational Organized Crime

UNTOC’s purpose, set out in Article 1, is to promote ‘cooperation to prevent and combat transnational organised crime more effectively’. It was opened for signature on 12 December 2000 and entered into force on 29 September 2003. Following the creation of the Convention, three additional and supplementary Protocols were drafted. Each of these Protocols addresses a specific crime-type, including trafficking in persons,⁶² smuggling of migrants,⁶³ and illegal manufacture of and trafficking in firearms, their parts, an ammunition.⁶⁴ UNTOC has been widely accepted; 190 States are Party to the Convention as of 1 February 2020.

⁶¹ Neil Boister, *An Introduction to Transnational Criminal Law* (2nd ed, 2018) 201.

⁶² *Protocol to Prevent, Suppress and Punish Trafficking in Persons, especially Women and Children*, opened for signature 12 December 2000, 2237 UNTS 319 (entered into force 25 December 2003).

⁶³ *Protocol against the Smuggling of Migrants by Land, Sea, and Air*, opened for signature 12 December 2000, 2241 UNTS 507 (entered into force 28 January 2004).

⁶⁴ *Protocol against the Illicit Manufacturing of and Trafficking in Firearms, Their Parts and Components and Ammunition*, opened for signature 31 May 2001, 2326 UNTS 208 (entered into force 3 July 2005).

While *UNTOC* explicitly applies to certain offences, including those articulated in the three Protocols and four specific offences included in the Convention itself (corruption,⁶⁵ money-laundering,⁶⁶ obstruction of justice,⁶⁷ and participation in an organised criminal group⁶⁸), it also applies more broadly to 'prevention, investigation and prosecution' of any 'serious crime'.⁶⁹ 'Serious crime' is defined in Article 2(b) as 'conduct constituting an offence punishable by a maximum deprivation of liberty of at least four years or a more serious penalty'. This criterion is essential to the scope of the Convention. To enliven the full range of the Convention's provisions, the maximum penalty of the relevant offence must be at least four years. If this threshold is unmet, many provisions of the Convention will not apply.

Pursuant to Article 3, the application of *UNTOC* is limited to situations where offences are transnational in nature (defined in Article 3(2)) and involve an organised criminal group. 'Organised criminal group' is defined in Article 2(a) of the Convention to mean

a structured group of three or more persons, existing for a period of time and acting in concert with the aim of committing one or more serious crimes or offences established in accordance with this Convention, in order to obtain, directly or indirectly, a financial or other material benefit.

Despite the requirement of transnationality, States must legislate independently of the transnational nature of crimes to avoid loopholes in domestic legislation.⁷⁰

UNTOC is designed to ensure flexibility and adaptability. Through its coverage of all 'serious crimes' (when transnational and involving an organised criminal group), the Convention ensures application to new and emerging forms of transnational criminal activity, in addition to those crimes specifically included in the Convention and its Protocols. Provided that crimes meet the definition of a 'serious crime' under Article 2(b), the provisions of the Convention apply. This is of particular importance in the

⁶⁵ *UNTOC*, art 8.

⁶⁶ *Ibid* art 6.

⁶⁷ *Ibid* art 23.

⁶⁸ *Ibid* art 5.

⁶⁹ *Ibid* art 3(1).

⁷⁰ *Ibid* art 34(2).

context of wildlife trafficking, which is otherwise not explicitly covered in the Convention or its Protocols. As Hennie Strydom observes, given the characteristics and typology of wildlife and forest crime, such criminal activities will commonly fall within the definition of an 'organised criminal group'.⁷¹ Furthermore, 'much of modern day wildlife crime is also transnational in nature and satisfies Article 3(2) of the Convention'.⁷²

Of course, whether or not *UNTOC* applies to wildlife trafficking in particular jurisdictions depends on national offences and the penalties attaching to them. They must be defined in such a way as to equate to 'serious crimes' under the Convention. The desire to bring wildlife trafficking within the scope of *UNTOC* is reflected in comments of the UN Economic and Social Council (ECOSOC) urging States Parties to the Convention to treat wildlife trafficking as a serious crime.⁷³ This call has been repeated by the Conference of the Parties for *CITES*, which recommends that States Parties to *CITES* 'make illicit trafficking in protected species of wild fauna and flora involving organized criminal groups a serious crime, in accordance with their national legislation and Article 2(b) of the United Nations Convention against Transnational Organized Crime'.⁷⁴

Despite these calls, many States have yet to make wildlife trafficking a serious crime under *UNTOC*. In a review of 131 States conducted by UNODC in 2015, only 26 per cent punished violations of *CITES* with a penalty of four years or more, with 31 per cent of the States reviewed punished violations through use of fines only.⁷⁵

In addition to *UNTOC*'s application to 'serious crimes', the offences set out in the Convention of corruption, money-laundering, obstruction of justice, and

71 Hennie Strydom, 'Transnational Organised Crime and the Illegal Trade in Endangered Species of Wild Fauna and Flora', in Pierre Hauck and Sven Peterke (eds), *International Law and Transnational Organised Crime* (2016) 264, 278.

72 Ibid.

73 UN Economic and Social Council, *Crime Prevention and Criminal Justice Responses to Illicit Trafficking in Protected Species of Wild Fauna and Flora*, UN Doc E/RES/2013/40 (17 October 2013).

74 *CITES*, Conference of the Parties, *Compliance and enforcement*, Resolution Conf. 11.3 (Rev. CoP18), 11th meeting of the Conference of the Parties, Gigiri (10 – 20 April 2000) (amended at the 13th, 14th, 15th, 16th, 17th, and 18th meetings of the Conference of the Parties) 8.

75 UNODC (n 4) 24; Lorraine Elliott, 'Fighting Transnational Environmental Crime' (2012) 66(1) *Journal of International Affairs* 87, 95; see also an example in Slobodan (n 1) 15.

participation in an organised criminal group are pertinent to wildlife trafficking. The offence of participation in an organised criminal group is especially relevant, given that many actors in organised criminal groups may only be indirectly connected to the wildlife offences themselves. 'Those in leadership positions seldom get involved in the actual execution of the criminal act and many individuals, although contributing to the activities of the syndicate in some way or another, might not have specific knowledge about the individual crimes associated with the syndicate'.⁷⁶ Of note is that *UNTOC* requires criminalisation of corruption in all cases, notwithstanding the associated crime, as well as criminalisation of laundering of the proceeds of any predicate crime.

Where *UNTOC* applies to a particular crime, the Convention encourages various forms of cooperation between States Parties, all of which are potentially relevant to law enforcement action against wildlife trafficking. Inter alia, provisions on transfer of sentenced persons,⁷⁷ mutual legal assistance,⁷⁸ joint investigations,⁷⁹ transfer of criminal proceedings,⁸⁰ and confiscation and seizure are included in the Convention.⁸¹ The Convention may also form the legal basis for extradition in the absence of a relevant agreement between States.

While *UNTOC* has been praised as an effective and necessary legal framework in the fight against wildlife crime,⁸² some commentators have discussed the benefits of a new Protocol to the Convention covering wildlife crime or environmental crime more broadly.⁸³ Creating offences in a new Protocol would ensure that their implementation in national laws would fall within the scope of *UNTOC*, even if they did not meet the definition of serious

76 Hennie Strydom, 'Transnational Organised Crime and the Illegal Trade in Endangered Species of Wild Fauna and Flora', in Pierre Hauck & Sven Peterke (eds), *International Law and Transnational Organised Crime* (2016) 264, 278.

77 *UNTOC*, art 17.

78 *UNTOC*, art 18.

79 *UNTOC*, art 19.

80 *UNTOC*, arts 12 and 13.

81 *UNTOC*, art 12.

82 UN General Assembly, *Tackling Illicit Trafficking in Wildlife*, UN Doc A/70/951 (16 June 2016) 1 [2].

83 Slobodan (n 1) 53–54; Global Initiative Against Transnational Organized Crime and WWF, *Tightening the Net: Toward a Global Legal Framework on Transnational Organized Environmental Crime* (2015) 34–36.

crime. Defining wildlife crime in a Protocol could also improve harmonization of national laws, facilitate cooperation, and increase attention to the phenomenon. Regardless of the potential benefits of an additional Protocol, the creation of such an instrument is unlikely in the foreseeable future.

2. Convention against Corruption

UNCAC is the principal, legally binding, international instrument dealing with corruption. The Convention builds on the example set by *UNTOC* and incorporates many measures similar to those in the earlier Convention. *UNCAC* was adopted on 31 October 2003 and entered into force on 14 December 2005. Like *UNTOC*, *UNCAC* enjoys significant acceptance by the international community; as of 1 September 2019, the Convention had 186 States Parties.

Corruption is a major enabler of wildlife crime.⁸⁴ Corruption can, for example, encompass ‘government officials being bribed to overlook poaching or trafficking; to switch or alter *CITES* permits so that, through fraudulent paperwork, an illegal specimen seems legal; and to falsify certification at the point of processing or end-point of sale’.⁸⁵ *UNCAC*, which criminalises corruption and sets out various measures to combat it, is complementary to broader efforts to combat wildlife crime under the other international instruments discussed so far in this chapter.

UNCAC contains provisions on five areas concerning anti-corruption: criminalisation, prevention, cooperation, asset recovery, and technical assistance and information exchange. The Convention has been described

84 UNODC (n 4) 20; Christian Nellemann et al (eds), *The Environment Crime Crisis: Threats to Sustainable Development from Illegal Exploitation and Trade in Wildlife and Forest Resources* (2014) 23; see further Chapter Three of this volume.

85 Angad Keith, ‘Hunting for Efficacy: A Critical Evaluation of International Responses to Wildlife Trafficking in the African Great Lakes Region’ (2018) 35 *Environmental and Planning Law Journal* 542, 555.

as ‘uniquely comprehensive’.⁸⁶ The Convention’s purposes, as stated in its Article 1, are

- (a) To promote and strengthen measures to prevent and combat corruption more efficiently and effectively;
- (b) To promote, facilitate and support international cooperation and technical assistance in the prevention of and fight against corruption, including in asset recovery;
- (c) To promote integrity, accountability and proper management of public affairs and public property.

UNCAC’s scope extends to the ‘prevention, investigation and prosecution’ of all corruption.⁸⁷

The Convention contains a number of criminalisation provisions, both mandatory and non-mandatory, all of which may be relevant to combatting wildlife crime. It requires criminalisation of bribery of national public officials (art 15), bribery of foreign public officials and officials of public international organisations (art 16), embezzlement (art 17), money-laundering (art 23), and obstruction of justice (art 25). It further encourages criminalisation of trading in influence (art 18), abuse of functions (art 19), and bribery in the private sector (art 21).

As with *UNTOC*, the link between wildlife crime and corruption is not made explicit in *UNCAC*. The role of the Convention in combatting wildlife crime is, however, emphasised in numerous international materials. The UN General Assembly, in December 2013,⁸⁸ stated that ‘coordinated action is critical to eliminate corruption and disrupt the illicit networks that drive and enable trafficking in wildlife’ and later, in July 2015, called on States to ‘prohibit, prevent and counter any form of corruption that facilitates illicit trafficking in wildlife and wildlife products’.⁸⁹ The United Nations Secretary-General also noted the important role of *UNCAC* in his report on

86 Michael Kubiciel and Anna Cornelia Rink, ‘The United Nations Convention against Corruption and its Criminal Law Provisions’, in Pierre Hauck and Sven Peterke (eds), *International Law and Transnational Organised Crime* (2016) 219, 222.

87 *UNCAC* art 3.

88 UN General Assembly, *Resolution adopted by the General Assembly on 18 December 2013: Strengthening the United Nations crime prevention and criminal justice programme, in particular its technical cooperation capacity*, UN Doc A/RES/68/193 (14 February 2014) 5.

89 UN General Assembly, *Resolution adopted by the General Assembly on 30 July 2015: Tackling illicit trafficking in wildlife*, UN Doc A/RES/69/314 (19 August 2015) 4.

Tackling Illicit Trafficking in Wildlife in 2016.⁹⁰ The CITES Conference of the Parties promulgated a Resolution in 2016 concerning *Prohibiting, Preventing, Detecting and Countering Corruption, which Facilitates Activities Conducted in Violation of the Convention*, which reaffirmed

that the United Nations Convention against Corruption (UNCAC) constitutes an effective tool and an important part of the legal framework for international cooperation in fighting illicit trafficking in endangered species of wild flora and fauna.⁹¹

Radha Ivory observes that there is an ‘emerging international consensus that wildlife trafficking and corruption must be addressed together and that their respective regimes, whilst distinct, are complementary’.⁹²

VI. Conclusion

Although wildlife trafficking has long been overlooked or dealt with as a peripheral problem by the international community and national governments, this has changed in recent years. The topic is receiving increasing attention and recognition nationally and internationally. This is demonstrated by the passage of numerous resolutions on wildlife trafficking by the United Nations General Assembly, expressing serious concern over poaching and emphasising the adverse economic, social, and environmental impacts of trafficking in endangered species.⁹³

Despite the lack of a single instrument concerning wildlife trafficking, principles and obligations relevant to combatting the crime can be drawn from a wide range of international treaties and other materials. Effective strategies to address wildlife trafficking require robust international cooperation, support from international organisations and NGOs, and implementation of States’ obligations in all the areas of law outlined in

⁹⁰ UN General Assembly (n 82).

⁹¹ CITES, Conference of the Parties, *Prohibiting, preventing, detecting and countering corruption, which facilitates activities in violation of the Convention*, Resolution Conf. 17.6, 17th meeting of the Conference of the Parties, Johannesburg (24 September–4 October 2016) 1.

⁹² Radha Ivory, ‘Corruption Gone Wild: Transnational Criminal Law and the International Trade in Endangered Species’ (2017) 111 *AJIL Unbound* 413, 416.

⁹³ See, for example, UN General Assembly, *Tackling Illicit Trafficking in Wildlife*, UN Doc A/RES/71/326 (28 September 2017).

this Chapter. In the face of increasing threats to species and their habitats, a holistic approach to such trafficking must be adopted, incorporating stringent trade regulation, punishment of organised crime and corruption, concerted efforts to protect and conserve the environment, and appropriate respect for animal welfare.

Bibliography

- Boister, Neil, *An Introduction to Transnational Criminal Law*, Oxford: Oxford University Press, 2nd ed, 2018
- Bowman, Michael, 'Conflict or Compatibility? The Trade, Conservation and Animal Welfare Dimensions of CITES' (1998) 1(1) *Journal of International Wildlife Law and Policy* 9
- Bowman, Michael, Peter Davies and Catherine Redgwell, *Lyster's International Wildlife Law*, Cambridge: Cambridge University Press, 2nd ed, 2010
- CITES, Conference of the Parties, *CITES Strategic Vision: 2021 – 2030*, Resolution 18.3, 18th meeting of the Conference of the Parties, Geneva (17 – 28 August 2019)
- CITES, Conference of the Parties, *CITES and livelihoods*, Resolution 16.6 (Rev. CoP18), 16th meeting of the Conference of the Parties, Bangkok (3 – 14 March 2013) (amended at the 17th and 18th meetings of the Conference of the Parties)
- CITES, Conference of the Parties, *Compliance and enforcement*, Resolution Conf. 11.3 (Rev. CoP18), 11th meeting of the Conference of the Parties, Gigiri (10 – 20 April 2000) (amended at the 13th, 14th, 15th, 16th, 17th, and 18th meetings of the Conference of the Parties)
- CITES, Conference of the Parties, *Cooperation between CITES and the World Heritage Convention*, Document 15.6, 18th meeting of the Conference of the Parties, Colombo (23 May–3 June 2019)
- CITES, Conference of the Parties, *Cooperation of CITES with other biodiversity-related conventions*, Resolution 16.4, 16th meeting of the Conference of the Parties, Bangkok (3 – 14 March 2013).
- CITES, Conference of the Parties, *Disposal of illegally traded and confiscated specimens of CITES-listed species*, Resolution Conf. 17.8, 17th meeting of the Conference of the Parties, Johannesburg (24 September–4 October 2016)

- CITES, Conference of the Parties, *Prohibiting, preventing, detecting and countering corruption, which facilitates activities in violation of the Convention*, Resolution Conf. 17.6, 17th meeting of the Conference of the Parties, Johannesburg (24 September–4 October 2016)
- CITES, Conference of the Parties, *Transport of live specimen*, Resolution Conf. 10.21 (Rev. CoP16), 10th meeting of the Conference of the Parties, Harare (9–20 June 1997) (amended at the 14th and 16th meetings of the Conference of the Parties)
- CMS Secretariat, 'Agreements' (Website, undated) <<https://www.cms.int/en/cms-instruments/agreements>>
- CMS Secretariat, 'Memoranda of Understanding' (Website, undated) <<https://www.cms.int/en/cms-instruments/mou>>
- CMS Secretariat, 'Parties and Range States' (Website, undated) <<https://www.cms.int/en/parties-range-states>>
- Dalberg Global Development Advisors, *Not for Sale: Halting the Illegal Trade of CITES Species from World Heritage Sites*, Gland: WWF, 2017
- Elliott, Lorraine, 'Cooperation on Transnational Environmental Crime: Institutional Complexity Matters' (2017) 26(2) *Review of European Community and International Environmental Law* 107
- Elliott, Lorraine, 'Fighting Transnational Environmental Crime' (2012) 66(1) *Journal of International Affairs* 87
- Global Animal Law Project, 'UN Convention on Animal Health and Protection (UNCAHP), First Pre-Draft of the Global Animal Law (GAL) Association' (Web page, 23 August 2018) <<https://www.globalanimallaw.org/database/universal.html>>
- Global Initiative Against Transnational Organized Crime and WWF, *Tightening the Net: Toward a Global Legal Framework on Transnational Organized Environmental Crime*, Geneva: Global Initiative Against Transnational Organized Crime, 2015
- Graham, Kimberley, 'International Intent and Domestic Application of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES): The Case of the Ocelot (*Leopardus pardalis*)' (2017) 20(3–4) *Journal of International Wildlife Law & Policy* 253
- Harrop, Stuart, 'Wild Animal Welfare in International Law: The Present Position and the Scope for Development' (2013) 4(4) *Global Policy* 381
- IFAW, 'About IFAW' (Web page, undated) <<https://www.ifaw.org/au/about>>

- Ivory, Radha, 'Corruption Gone Wild: Transnational Criminal Law and the International Trade in Endangered Species' (2017) 111 *AJIL Unbound* 413
- Keith, Angad 'Hunting for Efficacy: A Critical Evaluation of International Responses to Wildlife Trafficking in the African Great Lakes Region' (2018) 35 *Environmental and Planning Law Journal* 542
- Kubiciel, Michael and Anna Cornelia Rink, 'The United Nations Convention against Corruption and its Criminal Law Provisions', in Pierre Hauck and Sven Peterke, *International Law and Transnational Organised Crime*, Oxford: Oxford University Press, 2016, 219
- Nellemann, Christian et al (eds), *The Environment Crime Crisis: Threats to Sustainable Development from Illegal Exploitation and Trade in Wildlife and Forest Resources*, Arendal: GRID/UNEP, 2011
- Sand, Peter H, 'Whither CITES? The Evolution of a Treaty Regime in the Borderland of Trade and Environment' (1997) 1 *European Journal of International Law* 29
- Scanlon, John E and Lisa Farroway, 'Organisational Consortiums: The International Consortium on Combating Wildlife Crime (ICWC)' in Grant Pink and Rob White (eds), *Environmental Crime and Collaborative State Intervention*, London: Palgrave Macmillan, 2016, 77
- Slobodan, Lydia, *Addressing Transnational Wildlife Crime through a Protocol to the UN Convention against Transnational Organized Crime: A Scoping Paper*, Bonn: IUCN Environmental Law Centre and WWF, 13 October 2014
- Strydom, Hennie, 'Transnational Organised Crime and the Illegal Trade in Endangered Species of Wild Fauna and Flora' in Pierre Hauck and Sven Peterke (eds), *International Law and Transnational Organised Crime*, Oxford: Oxford University Press, 2016, 264
- Swanson, Timothy, 'Why is There a Biodiversity Convention? The International Interest in Centralized Development Planning' (1999) 75(2) *International Affairs* 307
- Sykes, Katie, 'The Appeal to Science and the Formation of Global Animal Law' (2016) 27(2) *European Journal of International Law* 497
- Trouwborst, Arie et al, 'International Wildlife Law: Understanding and Enhancing Its Role in Conservation' (2017) 67(9) *BioScience* 784
- UN Economic and Social Council, *Crime Prevention and Criminal Justice Responses to Illicit Trafficking in Protected Species of Wild Fauna and Flora*, UN Doc E/RES/2013/40 (17 October 2013)

UN General Assembly, *Resolution adopted by the General Assembly on 18 December 2013: Strengthening the United Nations crime prevention and criminal justice programme, in particular its technical cooperation capacity*, UN Doc A/RES/68/193 (14 February 2014)

UN General Assembly, *Resolution adopted by the General Assembly on 30 July 2015: Tackling illicit trafficking in wildlife*, UN Doc A/RES/69/314 (19 August 2015)

UN General Assembly, *Tackling Illicit Trafficking in Wildlife*, UN Doc A/RES/69/314 (19 August 2015)

UN General Assembly, *Tackling Illicit Trafficking in Wildlife*, UN Doc A/70/951 (16 June 2016)

UN General Assembly, *Tackling Illicit Trafficking in Wildlife*, UN Doc A/RES/71/326 (28 September 2017)

UNEP, Convention on Migratory Species, *The Prevention of Illegal Killing, Taking and Trade of Migratory Birds*, UNEP Doc UNEP/CMS/Resolution 11.16 (4 – 9 November 2014)

UNODC, *Wildlife and Forest Crime Analytic Toolkit*, New York, NY: United Nations, rev ed, 2012

UNODC, *World Wildlife Crime Report: Trafficking in Protected Species*, New York, NY: United Nations, 2016

Wandesforde-Smith, Geoffrey, 'Looking for Law in All the Wrong Places? Dying Elephants, Evolving Treaties, and Empty Threats' (2016) 19(4) *Journal of International Wildlife Law & Policy* 365

Chapter Six

The Convention on International Trade in Endangered Species of Wild Flora and Fauna and the Illegal Wildlife Trade: A Critical Perspective

MADELEINE PITMAN

This chapter critically evaluates the successes and limitations of the *Convention on International Trade in Endangered Species of Wild Flora and Fauna* (CITES) in regulating the international wildlife trade and contributing to international responses against wildlife trafficking. This chapter demonstrates that despite valid criticisms of the Convention's practical implementation and compliance mechanisms, CITES remains the primary international instrument to combat the pervasive threat of the illegal wildlife trade. This chapter argues that it is necessary to strengthen the CITES regime through enhanced transnational cooperation between CITES and other international agreements, organisations and coalitions, but also underscores the increasing pressure for the development of a specific convention against international wildlife crime.

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I. Introduction

Over the past decade, there has been growing momentum within the international community to combat the widespread and devastating consequences of the illegal wildlife trade.¹ The available sources discussing the scale of the illegal wildlife trade reveal major inconsistencies in quantified assessments, and considerable disagreement as to the changing levels and characteristics of trafficking in wild flora and fauna.² But although the precise scope or worth of the illegal wildlife trade is uncertain,³ the serious consequences of such trade are widely acknowledged.⁴ The illegal international trade in endangered species has critical ramifications for animal welfare, global biodiversity, environmental

1 Angad Keith, 'Hunting for Efficacy: A Critical Evaluation of International Responses to Wildlife Trafficking in the African Great Lakes Region' (2018) 35 *Environmental and Planning Law Journal* 542, 542 – 543; CITES Secretariat, 'The International Consortium on Combating Wildlife Crime', *Wildlife Crime* (Web page, undated); Jafari R Kideghesho, 'Reversing the Trend of Wildlife Crime in Tanzania: Challenges and Opportunities' (2016) 25(3) *Biodiversity and Conservation* 427, 427 – 428; John Martin Chamberlin, 'Wildlife Crime' in Margaret E Beare (ed), *Encyclopedia of Transnational Crime & Justice* (2012) 467 – 468.

2 Daniel WS Challender, Stuart R Harrop and Douglas C MacMillan, 'Understanding Markets to Conserve Trade-Threatened Species in CITES' (2015) 187 *Biological Conservation* 249, 251 – 252; William S Symes et al, 'The Gravity of Wildlife Trade' (2017) 218 *Biological Conservation* 268, 268; UNEP, *Analysis of the Environmental Impacts of Illegal Trade in Wildlife*, UNEP/EA.2/INF/28 (2016) 6 – 7.

3 INTERPOL, *Global Wildlife Enforcement: Strengthening Law Enforcement Cooperation Against Wildlife Crime* (March 2019) 1; OECD, *Illegal Trade in Environmentally Sensitive Goods* (2012) 13 – 14.

4 See, for example, Symes et al (n 2) 268.

and natural resource protection, sustainable development, and, where connected to organised crime and armed conflict, human security.⁵

This chapter refers to the illegal wildlife trade as the transnational movement of species, specimens and their derivatives in contravention of the provisions and controls established in international law.⁶ There is no universal definition of 'illegal wildlife trade', a term used interchangeably in other sources with 'wildlife smuggling, trafficking or exploitation'.⁷ Despite the increasing global efforts targeted at preventing and suppressing the illegal trade in wildlife, there is still no firm consensus on its precise scope or magnitude as a form of transnational 'environmental' or 'wildlife crime'.⁸

There is resounding agreement among international environmental scholars, professionals, and activists that international cooperation is fundamental in any serious efforts for preventing and suppressing the illegal wildlife trade.⁹ The need for coordinated global responses to combat the ecological, economic, and security consequences of wildlife trafficking is exemplified in the vast majority of policies and campaigns pertaining to the protection

5 See, for example, Keith (n 1) 543; Kideghesho (n 1) 428; Hennie Strydom, 'Transnational Organised Crime and the Illegal Trade in Endangered Species of Wild Fauna and Flora' in Pierre Hauck & Sven Peterke (eds), *International Law and Transnational Organised Crime* (2016) 264, 266; Kideghesho (n 1) 428; UNEP (n 2) 2; William H Schaedla, 'Local Socio-cultural, Economic and Political Factors of Transnational Wildlife Crime' in Lorraine Elliott and William H Schaedla (eds), *Handbook of Transnational Environmental Crime* (2016) 45, 59; Vincent Niiman, 'An Overview of International Wildlife Trade from Southeast Asia' (2010) 19(4) *Biodiversity and Conservation* 1101, 1103.

6 OECD (n 3) 15–17.

7 See, for example, Greg L Warchol, 'The Transnational Illegal Wildlife Trade' (2004) 17(1) *Criminal Justice Studies* 57, 58–59; Rebecca N Johnson, 'The Use of DNA Identification in Prosecuting Wildlife-Traffickers in Australia: Do the Penalties Fit the Crime?' (2010) 6(3) *Forensic Science, Medicine, and Pathology* 211, 211–216; Samuel K Wasser et al, 'Combating the Illegal Trade in African Elephant Ivory with DNA Forensics' (2008) 22(4) *Conservation Biology* 1065, 1065–1071.

8 See, for example, Carole Gibbs et al, 'Introducing Conservation Criminology: Towards Interdisciplinary Scholarship on Environmental Crimes and Risks' (2010) 50(1) *British Journal of Criminology* 124, 124–126; Challender, Harrop and MacMillan (n 2) 249; Strydom (n 5) 264.

9 Keith (n 1) 542–599; Kimberley Graham, 'International Intent and Domestic Application of the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES): The Case of the Ocelot (*Leopardus pardalis*)' (2017) 20(3–4) *Journal of International Wildlife Law & Policy* 253, 254.

of vulnerable and endangered species.¹⁰ Evidently, the illegal wildlife trade is an environmental threat that transcends national borders and demands regional responses and global action.¹¹ However, existing international frameworks are fragmented and limited in application. There is no specific international agreement directly targeted to the eradication of environmental or wildlife crimes, including illegal wildlife trade.¹²

The principal international instrument for the regulation and restriction of trade in wildlife is the *Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES)*.¹³ The overarching objective of *CITES* is to protect vulnerable and endangered species of wild flora and fauna from over-exploitation caused or exacerbated by international trade.¹⁴ Effectively, *CITES* aims to regulate and monitor the international trade of endangered species, whether alive or dead, and their derivatives, in a manner that balances the conservation of wildlife with the economic interests of states in utilising their natural resources.¹⁵

CITES entered into force in 1975, and is often cited as the most successful multilateral environmental agreement concerned with biological conservation and wildlife protection.¹⁶ *CITES* regulates international trade through a permit system which is based upon whether the wild plant or animal species is listed in either of three Appendices to the treaty. The

¹⁰ Strydom (n 8) 272–273; INTERPOL (n 3) 1–2; UN, *The Future We Want*, Outcome Document of the United Nations Conference on Sustainable Development, Rio de Janeiro, Brazil 20–22 June 2012 (2012) 53–54; UNEP (n 2) 2; UNODC, *World Wildlife Crime Report: Trafficking in Protected Species* (2016) 23.

¹¹ Christian Nellemann et al (eds), *The Environmental Crime Crisis: Threats to Sustainable Development from Illegal Exploitation and Trade in Wildlife and Forest Resources* (2014) 48–49; Michael Bowman, 'Environmental Protection and the Concept of Common Concern of Mankind' in Malgosia Fitzmaurice, David M Ong and Panos Merkouris (eds), *Research Handbook on International Environmental Law* (2010) 493, 494–495; UNEP (n 2) 2.

¹² Bowman (n 11) 494–495.

¹³ Opened for signature 3 March 1973, 993 UNTS 243 (entered into force 1 July 1975).

¹⁴ Strydom (n 8) 270.

¹⁵ Geoffrey Wandesforde-Smith, 'Looking for Law in All the Wrong Places? Dying Elephants, Evolving Treaties, and Empty Threats' (2016) 19(4) *Journal of International Wildlife Law & Policy* 365, 367; Strydom (n 8) 264.

¹⁶ David M Ong, 'International Environmental Law Governing Threats to Biological Diversity' in Malgosia Fitzmaurice, David M Ong and Panos Merkouris (eds), *Research Handbook on International Environmental Law* (2010) 519, 521; Strydom (n 8) 264.

main requirements of the permit system consist of the provision of relevant documentation between importing and exporting States Parties, which is administered and monitored by established national institutions. In effect, the 'protective measures' or trade restrictions imposed on States Parties depend on the listing of the particular species.¹⁷ *CITES* currently regulates the international trade of more than 35,000 species and subspecies of flora and fauna.¹⁸

Although *CITES* is the primary international mechanism for controlling trade in vulnerable and endangered species of flora and fauna, its achievements and limitations continue to be the subject of significant debate.¹⁹ A considerable number of scholars from legal, scientific, and conservationist backgrounds have discussed the shortcomings of *CITES* in preventing and suppressing illegal trade in wildlife, but also the Convention's limitations as a 'conservation' agreement more broadly. Some assessments view the Convention as an indispensable instrument in the 'conservation toolbox', while others assert that the *CITES* regime is simply a 'toothless paper tiger' and 'waste of resources'.²⁰ Political and ideological differences between Parties to the Convention have raised other challenges related to *CITES'* approach of 'strict protection' versus 'sustainable use' of endangered species.²¹ Similarly, many scholars underscore the limitations of *CITES* as an international environmental regime for combating wildlife crime are inextricably tied to the Convention's purpose in regulating the international trade in wildlife.²² It is often stressed that the contributions of *CITES* to biological conservation and the fight against environmental crime are constrained due to the Convention's role in legitimising

17 Ong (n 16) 524 – 525.

18 CITES Secretariat, 'The CITES Species' (Web page, 2 January 2017).

19 Wandesforde-Smith (n 15) 366.

20 Arie Trouwborst et al, 'International Wildlife Law: Understanding and Enhancing Its Role in Conservation' (2017) 67(9) *BioScience* 784, 789.

21 Andrew Taylor et al, 'Sustainable Rhino Horn Production at the Pointy End of the Rhino Horn Trade Debate' (2017) 216 *Biological Conservation* 60 – 61; Trouwborst et al (n 20) 785; Catherine L Krieps, 'Sustainable Use of Endangered Species under CITES: Is It a Sustainable Alternative?' (1996) 17(1) *University of Pennsylvania Journal of International Law* 461, 481; Wandesforde-Smith (n 15) 366.

22 Ong (n 16) 524 – 525.

international trade in endangered species, albeit within the controls imposed by the legal regime.²³

This chapter provides a critical review of the operation and administration of *CITES* in regulating the international wildlife trade and further analyses the role and relevance of the Convention in combating the global illegal trade in endangered species. Specifically, this chapter identifies and evaluates three core criticisms of *CITES* as a global biodiversity measure and instrument in the international response to wildlife crime. This chapter maintains that while these critiques demonstrate valid and pertinent problems in current experiences of practice and compliance, *CITES* remains the primary legal mechanism to facilitate international action against the threat of unsustainable and illicit international trade to endangered species. Despite its constraints, *CITES* has evolved from the early 1970s to contribute some force in the implementation and enforcement of Party obligations.²⁴ For this reason, the position of this analysis is that serious consideration must be given to strengthening the long-term and legally binding commitments imposed by the *CITES* regime on a transboundary scale, and enhancing cooperation between the Convention and other international environmental agreements and institutions.

The range of academic literature, institutional reports and commentary on the implementation, successes and limitations of *CITES* of the past five decades is very extensive.²⁵ Existing scholarship typically focuses on the role of *CITES* in relation to conservation of particular species,²⁶ regional

²³ Ibid.

²⁴ Trouwborst et al (n 20) 787.

²⁵ See generally Kriepps (n 21) 481; John L Garrison, 'The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Debate Over Sustainable Use' (1994) 12(1) *Pace International Law Review* 301, 303; Trouwborst et al (n 20) 784–786; Wandesforde-Smith (n 15) 365; Laura H Kosloff and Mark C Trexler, 'The Convention on International Trade in Endangered Species: No Carrot, but Where's the Stick?' (1987) 17 *Environmental Law Reporter* 10222, 10222–10223.

²⁶ See, for example, Bram Janssens and Arie Trouwborst, 'Rhinoceros Conservation and International Law: The Role of Wildlife Treaties in Averting Megaherbivore Extinction' (2018) 21(2–3) *Journal of International Wildlife Law & Policy* 146; Linlin Li and Zhigang Jiang, 'International Trade of CITES Listed Bird Species in China' (2014) 9(2) *PLoS ONE* [s.p.]; Julie Cheung, 'Implementation and Enforcement of CITES: An Assessment of Tiger and Rhinoceros Conservation Policy in Asia' (1995) 5(1) *Pacific Rim Law & Policy Journal* 125; Vincent Nijman and Chris R Shepherd, 'The Role of Thailand in the International Trade in CITES-Listed Live Reptiles and Amphibians' (2011) 6(3) *PLoS ONE* [s.p.].

trends in compliance,²⁷ and broad connections with transnational organised crime and corruption.²⁸ This chapter does not intend to provide a definitive discussion of the various assessments of the Convention, but rather aims to provide a critical perspective on the main critiques raised by prominent authors and organisations in the prior literature on *CITES* and the illegal wildlife trade.

Part II of this chapter discusses the background, development, and purpose of *CITES*. Part III provides a detailed review of the operation of *CITES*, including the substantive provisions for the regulation of 'legal' international trade in wildlife, and the articles relevant to the criminalisation of the illegal international trade. Part IV outlines the administration of *CITES* at the international and domestic levels and highlights the main administrative bodies and implementation mechanisms. Part V comprises the main critical and analytical contribution of this chapter and evaluates the the prominent arguments directed to the Convention's narrow scope and coverage, contested approach to ecological conservation, and finally, lack of effective and consistent enforcement mechanisms. Part IV considers the way ahead for *CITES*, and presents conclusions on the recommendations for the future of international wildlife law.

II. History and development

1. Background to multilateral environmental and wildlife agreements

The development of *CITES* can be traced to several foundational international agreements for the preservation of fauna and flora.²⁹ Early

²⁷ See, for example, Lynn P Marshall, 'Canada's Implementation of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (Cites): The Effect of the Biodiversity Focus of International Environmental Law' (1999) 9 *Journal of Environmental Law and Practice* 31; Sherryn Ciavaglia et al, 'Current Issues with the Investigation of Wildlife Crime in Australia: Problems and Opportunities for Improvement' (2015) 18(3) *Journal of International Wildlife Law & Policy* 244.

²⁸ See, especially, Strydom (n 8) 264.

²⁹ John Lanchbery, 'Long-Term Trends in Systems for Implementation Review in International Agreements on Fauna and Flora' in David G Victor, Kal Raustiala and Eugene B

international treaties on flora concentrated on preventing the spread of disease and maintaining healthy cultivation stocks, while early international agreements for the protection of wild fauna were primarily concerned with resource productivity and management.³⁰ These initial species-specific agreements were largely motivated by narrow utilitarian objectives,³¹ and directly targeted at ensuring the production of resources derived from species threatened with endangerment and extinction.³²

A prominent example includes the conservation instruments adopted to resolve disputes concerning the preservation of fur seals in the North Pacific Ocean.³³ Following unresolved disputes surrounding a bilateral treaty between the United States and the United Kingdom,³⁴ a multilateral convention was adopted to secure the 'protection' of North Pacific Ocean fur seals in 1911.³⁵ The preamble to the Convention explicitly refers to the need to ensure the 'maximum sustainable productivity of the fur seal resources of the North Pacific Ocean'.³⁶ The 1911 agreement expired prior to the outbreak of the Second World War,³⁷ and was succeeded by the 1957 *Interim Convention on Conservation of North Pacific Fur Seals*.³⁸ The core motivation underlying the 'North Pacific Fur Seal Treaties' was not in fact the conservation of the species, but rather ensuring continued production of seal fur for commercial purposes.³⁹

In response to the narrow aims of species-specific treaties, multilateral agreements were drafted to provide special protection for wild flora and

Skolnikoff (eds), *The Implementation and Effectiveness of International Environmental Commitments: Theory and Practice* (1998) 57, 57–58.

30 Ibid 58–59.

31 Michael Bowman, Peter Davies, and Catherine Redgwell, *Lyster's International Wildlife Law* (2nd ed, 2010) 4–5.

32 Strydom (n 8) 268.

33 Bowman (n 11) 495–496; Chandler P Anderson et al, 'The North Pacific Sealing Convention' (1911) 5(4) *American Journal of International Law* 1025, 1026.

34 Strydom (n 8) 268.

35 *Convention Between the United States, Great Britain, Japan and Russia Providing for the Preservation and Protection of the Fur Seals* signed 7 February 1911, 37 Stat. 1542 (entered into force 12 December 1911).

36 Strydom (n 8) 268.

37 Michael Bhargava, 'Of Otters and Orcas: Marine Mammals and Legal Regimes in the North Pacific' (2005) 32(4) *Ecology Law Quarterly* 939, 944.

38 Signed on 9 February 1957, 314 UNTS 105 (entered into force 14 October 1957).

39 Bhargava (n 37) 942.

fauna, with an increased focus on conservation as opposed to sustainable resource production.⁴⁰ The *Convention Relative to the Preservation of Fauna and Flora in their Natural State*,⁴¹ commonly referred to as the 'London Convention', is widely regarded as the first multilateral 'special protective regime' for wild flora and fauna.⁴² The *London Convention* was adopted by nine states (and former colonial powers) in 1933, and closely modelled on the previous 1900 *Convention for the Preservation of Wild Animals, Birds and Fish in Africa* (never entered into force).⁴³ The *London Convention* not only included provisions imposing an obligation on States Parties to establish wildlife parks and conservation reserves,⁴⁴ but notably implemented a 'schedule system' which categorised species according to levels of protection. This schedule structure directly informed the Appendices and listing system of *CITES*.⁴⁵ The conceptual and structural approach implemented in the *London Convention* has been utilised in almost all following multilateral treaties on flora and fauna.⁴⁶ A prominent example is the 1940 *Convention on Nature Protection and Wild Life Preservation in the Western Hemisphere*,⁴⁷ which targeted habitat preservation as a key measure in the protection of endangered species, and included a specific provision for the regulation of export, import, and transit of protected species.⁴⁸ These early multilateral environmental agreements were ultimately unsuccessful for various reasons, most significantly being the impact of geopolitical events including the Second World War and decolonisation, absence of effective institutional

40 Barry Walden Walsh, 'Convention on International Trade in Endangered Species of Wild Flora and Fauna: A CITES Timeline' (2005) 26(1–2) *Selbyana* 92, 93–94; Lanchbery (n 29) 58–59.

41 Signed 8 November 1933, 172 LNTS 241 (entered into force 14 January 1936).

42 Strydom (n 8) 269.

43 Signed 19 May 1900.

44 Strydom (n 8) 269.

45 Peter H Sand, 'Whither CITES? The Evolution of a Treaty Regime in the Borderland of Trade and Environment' (1997) 1 *EJIL* 31–32.

46 Walden Walsh (n 40) 92; Lanchbery (n 29) 59.

47 Signed on 12 October 1940, 161 UNTS 229 (entered into force 30 April 1942).

48 Strydom (n 8) 268–269.

mechanisms for ensuring compliance and enforcement, and other operational weaknesses.⁴⁹

2. New responses to the international wildlife trade

As early as the 1950s, traction was growing within the international community for a multilateral convention which imposed global and concrete restrictions on the commercial and non-commercial exploitation of endangered wildlife.⁵⁰ During the 1960s, there was growing public awareness of the threats to the survival of vulnerable species of flora and fauna, as well as increasing pressure from global civil society to respond to the dramatic increase in international wildlife trade, particularly in the form of illicit smuggling and trafficking.⁵¹ It was against this background of international momentum to address the practical and political problems associated with the illegal wildlife trade that the General Assembly of the International Union for Conservation of Nature and Natural Resources (IUCN) called for 'an international convention on the regulation of export, transit, and import of rare or threatened wildlife species or their skins and trophies'.⁵² The IUCN was critical in the drafting and negotiation process of the structure and text of *CITES*,⁵³ which involved the preparation and revision of multiple successive drafts between 1963 and 1972.⁵⁴ The IUCN built upon several features of earlier flora and fauna agreements, the most important being the use of lists to categorise threatened species according to the level of protection or trade restriction necessary to ensure continued survival.⁵⁵ *CITES* was concluded in Washington, DC on 3 March

49 Michael Bowman, 'The Nature, Development and Philosophical Foundations of the Biodiversity Concept in International Law' in Michael Bowman and Catherine Redgwell (eds), *International Law and the Conservation of Biological Diversity* (1996) 5, 15–17.

50 Lanchbery (n 29) 57, 65; William C Burns, 'CITES and the Regulation of International Trade in Endangered Species of Flora: A Critical Appraisal' (1990) 8(2) *Penn State International Law Review* 202, 203–204.

51 Bowman, Davies, and Redgwell (n 31) 483–484.

52 IUCN, *Proceedings of the 8th Session of the General Assembly* (1963) 130.

53 Burns (n 50) 204.

54 Strydom (n 8) 270.

55 *Ibid.*

1973, and entered into force just over two years later on 1 July 1975.⁵⁶ As on 1 January 2020, there are 183 Parties to the Convention.⁵⁷

III. Purpose and objectives

1. Preamble

From its inception, *CITES* has been regarded as the most important instrument for the protection of threatened and endangered species of flora and fauna against exploitative international trade.⁵⁸ The Convention was drafted on the basis that cooperation in the international community ‘is essential for the protection of wild flora and fauna against over-exploitation through international trade’.⁵⁹ Its Preamble acknowledges the role of ‘individual peoples and nations in cooperation with the international community’ in protecting endangered species from over-exploitation.⁶⁰ Furthermore, *CITES* refers to the need to protect wild flora and fauna ‘in their many beautiful and varied forms’ for present and future generations, and recognises their diverse ‘aesthetic, scientific, cultural, recreational and economic’ values.⁶¹

2. Tension between trade and conservation objectives

Although *CITES* is widely recognised as an international conservation instrument for the preservation and protection of wildlife, it remains that there is a strong divergence in opinion as to ‘how *CITES* should be

⁵⁶ Bowman, Davies, and Redgwell (n 31) 484.

⁵⁷ CITES Secretariat, ‘List of Contracting Parties’ (Web page, 14 January 2020).

⁵⁸ Garrison (n 25) 303–304.

⁵⁹ *CITES*, preamble.

⁶⁰ Jay E Carey, ‘Improving the Efficacy of CITES by Providing the Proper Incentives to Protect Endangered Species’ (1999) 77(4) *Washington University Law Review* 1291, 1294–1295.

⁶¹ *CITES*, preamble.

interpreted and what its primary purpose should be'.⁶² Several commentators underscore the fact that *CITES* is by definition an international trade agreement: the Convention operates to regulate and legalise certain levels of trade in wildlife.⁶³ David Ong, for instance, stresses that *CITES* was not designed for the direct protection or conservation of endangered species, and only plays an indirect role through the controls it places on commercial trade.⁶⁴ John Garrison emphasises the inclusion of the term 'over-exploitation' in the Preamble to the Convention as indicative of the core purpose of the Convention.⁶⁵ He contends that the reference to protecting vulnerable species from 'over-exploitation' recognises that while unregulated trade can threaten the survival of wild species, 'some exploitation' is permissible.⁶⁶

This demonstrates the inherent conflict between the trade and conservation objectives of *CITES*,⁶⁷ particularly in terms of whether endangered species should be subject to strict protection or in accordance with principles of sustainable use.⁶⁸ Many scholars stress that complete prohibitions on all forms of trade in species and their derivatives would be an infringement on state sovereignty, and the right of sovereign states to 'derive some benefit' from species located within their territories.⁶⁹ This argument is frequently raised by governments of 'producer' states which view sustainable use trade as an effective compromise between ecological and economic interests.⁷⁰ From this perspective, the Convention is a vehicle for regulating the international wildlife trade, not 'stopping trade and use of species altogether'.⁷¹

62 See Garrison (n 25) 305; Michael Bowman, 'Conflict or Compatibility? The Trade, Conservation and Animal Welfare Dimensions of CITES' (1998) 1(1) *Journal of International Law & Policy* 9, 9–11.

63 Ong (n 16) 524; Erica Thorson and Chris Wold, *Back to Basics: An Analysis of the Purpose of CITES and a Blueprint for Implementation* (2010) 7–10; Bowman, Davies, and Redgwell (n 31) 484.

64 Ong (n 16) 524.

65 Garrison (n 25) 304–305.

66 Ibid 305.

67 Keith (n 1) 545; Bowman (n 62) 58.

68 Garrison (n 25) 309.

69 See, for example, Ong (n 16) 524–525; Garrison (n 25) 305.

70 Krieps (n 21) 481; Wandesforde-Smith (n 15) 372; Carey (n 60) 1292.

71 Garrison (n 25) 315.

CITES attempts to balance needs for environmental and wildlife conservation with the interests of States Parties in trading species for commercial purposes.⁷² Simon Lyster provides a balanced analysis in identifying *CITES* as a ‘protectionist’ and ‘trading’ treaty in the sense that it both prohibits international commercial trade in species threatened with extinction and permits controlled trade in species whose survival status is ‘not yet threatened but may become so’.⁷³ Other scholarship has also emerged in relation to the Convention’s underlying animal welfare objectives, exemplified in the various provisions ‘intended to ensure the welfare of species introduced into international trade’.⁷⁴ Michael Bowman, for instance, stresses that the animal welfare dimension to *CITES* is frequently ‘neglected and overlooked’,⁷⁵ despite the explicit references to welfare protection throughout the text of the Convention. It is asserted that Lyster and Bowman, among others, accurately identify that while there is a ‘degree of tension’, there is no ‘fundamental incompatibility’ between the trade, conservation, and animal welfare objectives of *CITES*.⁷⁶

3. Emerging focus on the illegal wildlife trade

The Convention does not explicitly include any purpose or commitment related to combating the illegal trade in wildlife or suppressing other forms of wildlife crime related to exploitation or cruelty. It is only in recent years that scholars have focused on the dimensions of *CITES* relevant to combating the illicit trade in wildlife, and specifically the effect of its requirement of penalisation and prohibition of trade in contravention of its provisions.⁷⁷ While it is clear that *CITES* is by no means an international criminal law instrument, and was not developed or drafted for the international enforcement or prosecution of wildlife crime, *CITES* was nevertheless developed from a surge of international concern for the impacts of unregulated trade and trafficking in wildlife.⁷⁸ It

⁷² Ong (n 16) 524 – 525; Bowman (n 62) 10.

⁷³ Simon Lyster, *International Wildlife Law* (1985), discussed in Ong (n 16) 525.

⁷⁴ Bowman (n 62) 10 – 11.

⁷⁵ *Ibid.*

⁷⁶ *Ibid* 58 – 59; Lyster (n 73) discussed in Ong (n 16) 525.

⁷⁷ Wandesforde-Smith (n 15) 367.

⁷⁸ UNODC, *Wildlife and Forest Crime Analytic Toolkit* (rev ed, 2012) 15.

is on this basis that significant attention has been placed on the potential and present role of *CITES* in responding to the illegal trade in wildlife.⁷⁹ Apart from *CITES*, there is no other international environmental, wildlife, or criminal law that can be invoked to counteract the threat to endangered species from wildlife crime.⁸⁰

IV. Operation

1. Regulation of international wildlife trade

1.1. Appendices and permit system

CITES regulates the international trade in vulnerable and endangered species of flora and fauna listed in the three Appendices to the Convention.⁸¹ The Convention operates through a permit or licensing system, which is based on whether the species concerned is listed in either of the three appendices.⁸² The main requirement of the permit system is the provision of permit documentation between importing and exporting States in a 'descending order of strictness depending on whether the species involved are listed in Appendix I, II or III'.⁸³ In essence, the permit restrictions imposed on trade in species varies between the three appendices.⁸⁴

(a) Scope of international trade

The concept of international trade is defined under Article I(c) of the Convention as 'export, re-export, import and introduction from the sea'. An important feature of the meaning of trade under *CITES* is that is considerably broader than other definitions of trade as 'commerce for profit'.⁸⁵ The purpose or nature of the exportation or importation is

⁷⁹ Wandesforde-Smith (n 15) 367.

⁸⁰ UNODC (n 78) 15.

⁸¹ Bowman, Davies, and Redgwell (n 31) 484.

⁸² Ong (n 16) 524.

⁸³ Ibid.

⁸⁴ David S Favre, *International Trade in Endangered Species: A Guide to CITES* (1989) 30.

⁸⁵ Ibid 25.

irrelevant: Any time that a specimen of the species protected under the Convention crosses a national border, the action is considered to be trade and will have satisfied the provisions of the treaty.⁸⁶ Furthermore, it is not an issue if the exporting country is not also the species' country of origin, as this is explicitly included as 're-exporting' in the definition of trade.⁸⁷ It is critical to stress that the operation of *CITES* is limited to the regulation of international trade only, and does not extend to domestic trade within national borders. There are no permit or certificate requirements for the 'transit or transshipment of specimens through the territory of a State Party'.⁸⁸

(b) Protected specimens

CITES specifically regulates international trade in 'specimens of species'(art II(4)). Species means 'any species, subspecies, or geographically separate population thereof, and 'specimen' is defined as 'any animal or plant, whether or alive or dead' (art I(a)), as well as 'any readily recognisable parts or derivatives' (art I(b)). The definitions of 'species' and 'species' under Article I allows for the 'split-listing' of different populations of the same species,⁸⁹ and extends trade restrictions to particular parts and physical items of protected specimens (art I(b)). The term 'readily recognisable' is not defined in the Convention text, which provides that certain parts and derivatives are thus regulated by 'some Parties but not by others'.⁹⁰ Further clarification has been provided by the Conference of the Parties (CoP) which noted that

the term 'readily recognizable part or derivative', as used in the Convention, shall be interpreted to include any specimen which appears from an accompanying document, the packaging or a mark or label, or from other circumstances, to be a part or derivative of an animal or plant of a species included in the Appendices, unless such part or derivative is specifically exempted from the provisions of the Convention.⁹¹

⁸⁶ Ibid.

⁸⁷ Ibid.

⁸⁸ Ong (n 16) 526.

⁸⁹ Bowman, Davies, and Redgwell (n 31) 492.

⁹⁰ Ibid 491.

⁹¹ *CITES* Conference of the Parties, 'Trade in readily recognizable parts and derivatives', Resolution Conf. 9.6 (Rev. CoP16).

Species and subspecies of wildlife are classified under either Appendix I, II or III of the Convention depending on the level of threat from exploitation through international trade.⁹² Species listed in Appendix I are subject to the most stringent restrictions, followed by Appendix II and then III.⁹³

1.2. Appendix listing criteria and permit requirements

Article II establishes the listing criteria of the three Appendices and incorporates the ‘three very most basic components’ of *CITES*: the species listed in the three Appendices, the act of trade in those species, and the conditions and limitations of subsequent provisions.⁹⁴ Article II(4) requires that States Parties do not engage in trade in specimens of species included under Appendices I, II or III except in accordance with the provisions of the Convention (art I(b)). David Favre describes Article II as the ‘functional or operative heart’ of the *CITES*, which imposes the fundamental obligations of the treaty on State signatories.⁹⁵ Article II is also critical as it exemplifies that the primary focus of the Convention is international trade, not the range of other major threats to the protection and conservation of wild flora and fauna. The listing criteria established in the first three paragraphs of Article II, and the permit requirements for specimens of species included in each Appendix are examined below.

Note that while the text of *CITES* establishes ‘the basic conditions for the inclusion of a species in Appendix I, II or III’,⁹⁶ more detailed guidelines for the listing or de-listing of species are provided by the so-called ‘Fort Lauderdale Criteria’, which are not further discussed in detail here.⁹⁷ In relation to Appendix I and II, each State Party has the right to propose an amendment for consideration either by postal vote, or by submission to the *CITES* Secretariat prior to the next CoP meeting.⁹⁸ Proposals are adopted ‘if approved by a two-thirds majority of parties present and voting’.⁹⁹

⁹² Radha Ivory, ‘Corruption Gone Wild: Transnational Criminal Law and the International Trade in Endangered Species’ (2017) 111 *AJIL Unbound* 413, 413.

⁹³ *Ibid.*

⁹⁴ Favre (n 84) 29–30.

⁹⁵ *Ibid.* 31.

⁹⁶ Bowman, Davies, and Redgwell (n 31) 492.

⁹⁷ *Ibid.*

⁹⁸ *Ibid.* 496.

(a) Appendix I

(i) *Listing criteria*

Appendix I lists species threatened with extinction which are or may be affected by international trade. Species listed on Appendix I are subject to the highest degree of protection in order not to 'further endanger their survival' and trade is only permitted in extremely limited circumstances (art II(1)). Prominent Appendix I species include all African and Asian pangolin species, the blue humpback whale (*Megaptera novaeangliae*), hawksbill sea turtle (*Eretmochelys imbricata*), as well as certain populations of African elephants (*Loxodonta africana*), which are split-listed between Appendix I and Appendix II. Article II(1) establishes two criteria which must be satisfied for the listing of a species on Appendix I. The species must be: threatened with extinction, and be or potentially be affected by international trade.¹⁰⁰ Annex 1 of the *Fort Lauderdale Criteria* expands on these two requirements, particularly as to how a species may satisfy the 'biological criteria' required by the words 'threatened with extinction'.¹⁰¹

(ii) *Permit requirements: export and import*

Article III of CITES imposes the strict regulatory requirements for trade in Appendix I species. International trade in Appendix I species requires the prior grant and presentation of export and import permits (art III(1)). The grant of an export permit requires four different 'preconditions' to be satisfied in the form of approvals from the Scientific and Management authorities of the State of export (art III(2)). The satisfaction of one of the preconditions must be determined by the exporting State's Scientific Authority, and three by the Management Authority. The final precondition requires the State of import to have granted an import permit prior to the export of the specimen (art III(2)(d)).¹⁰² An import permit can only be granted where the Scientific Authority of the State of import is satisfied that the import of the species will be for purposes which are not detrimental to the survival of the species involved (art III(3)(a)), and that the proposed recipient of any living specimen is suitably equipped to

⁹⁹ Ibid.

¹⁰⁰ Favre (n 84) 31–32.

¹⁰¹ Bowman, Davies, and Redgwell (n 31) 494.

¹⁰² Ibid 500.

house and care for it (art III(3)(b)). In addition, the Management Authority of the State of import must be satisfied that the specimen is not to be used for 'primarily commercial purposes' (art III(3)(c)). The import of an Appendix I specimen requires the prior grant and presentation of an import permit and either an export permit or re-export certificate.¹⁰³

(iii) Certificate requirements: re-export and introduction from the sea

The re-export of any specimen of a species included in Appendix I, meaning the export of any specimen previously imported,¹⁰⁴ requires the prior grant and presentation of a re-export certificate (art III(4)). A re-export certificate can only be granted when three conditions are held to be satisfied by the Management Authority of the State of re-export (art III(4)). Article III(5) prohibits the introduction from the sea of any specimen of a species included in Appendix I without the prior grant of a certificate from a Management Authority of the State of introduction (art III(5)). A specimen is deemed to have been introduced from the sea if it has been 'taken in the marine environment not under the jurisdiction of any State' and is imported into that State (art I(e)). A certificate for introduction from the sea can only be granted if a Scientific Authority of the State of introduction advises that it will not be detrimental to the survival of the involved species (art III(5)(a)). The Management Authority of the State of introduction must also be satisfied that the other conditions required for the import of Appendix I species have been met.¹⁰⁵

The strength of the trade restrictions imposed by Article III lies in the requirement for the prior grant and presentation of two different permits or certificates. The 'double permit approach' also operates as a counter-measure to illegal activity or wildlife trafficking,¹⁰⁶ as it effectively requires the forgery of documents from two different State governments in order to attempt to utilise legal export and import routes. Moreover, the requirement for the Management Authority of the State of import or State of introduction to be satisfied that the specimen in question will not be used for 'primarily commercial purposes' effectively 'prohibits international commercial trade' and limits legal trade among States Parties to specimens

¹⁰³ Favre (n 84) 56–57.

¹⁰⁴ Bowman, Davies, and Redgwell (n 31) 500.

¹⁰⁵ Ibid 501.

¹⁰⁶ Favre (n 84) 58.

required for scientific and educational purposes, and in limited circumstances, to hunting trophies'.¹⁰⁷

(b) Appendix II

(i) *Listing criteria*

There are two grounds for the listing of a species on Appendix II. Article II(2)(a) includes 'all species which although not necessarily now threatened with extinction may become so unless trade in specimens of such species is subject to strict regulation' in order avoid over-exploitation. An Appendix II listing under Article II(2)(a) seeks to avoid a level of utilisation that is incompatible with the survival of the species. Essentially, Appendix II-listed species are under a potential threat of serious population decline, but should be able to sustain limited commercial trade with regular monitoring. The difficulty with the listing criteria under Article II(a) is that a future determination is required concerning trade and biological status (by reference to the Fort Lauderdale Criteria) of the species in question.¹⁰⁸ In addition, Appendix II to the Convention extends protection to 'look-alike species' (art II(2)(b)), which could potentially be confused by customs officers and other enforcement agencies, or even by the traders or traffickers themselves, as the specimen of a threatened species. Notably, there is no equivalent provision in the Convention text for Appendix I lookalike species.¹⁰⁹ This omission was recognised and rectified in the first CoP, when the Parties clarified that Appendix I lookalike species should also be included in Appendix II.¹¹⁰

Appendix II includes 'heavily traded species with relatively secure populations' as well as species 'which are not yet in trade but could be vulnerable if...traders suddenly switch from one target species to another'.¹¹¹ At present, Appendix II contains over 30,000 wild species, including well known species such as the American black bear (*Ursus americanus*), southern fur seal (*Arctocephalus forsteri*), great white shark

¹⁰⁷ Bowman, Davies, and Redgwell (n 31) 500–501.

¹⁰⁸ Favre (n 84) 38.

¹⁰⁹ Bowman, Davies, and Redgwell (n 31) 494.

¹¹⁰ CITES Conference of the Parties, Resolution Conf. 1.1

¹¹¹ Bowman, Davies, and Redgwell (n 31) 495.

(*Carcharodon carcharias*), green iguana (*Iguana iguana*) and queen conch (*Strombus gigas*).

(ii) *Permit and certificate requirements*

Article IV delineates the permit and certificate requirements for legal trade in Appendix II. Similar controls are imposed on the export and re-export of Appendix II species to those which apply to Appendix I species.¹¹² The rules for the import of Appendix II specimens are, however, significantly less stringent. The import of any specimen of a species included in Appendix II only requires ‘the prior grant and presentation of either an export permit or re-export certificate’.¹¹³ The grant of an Appendix II export permit under Article IV(2) requires the Scientific Authority and Management Authority of the State of export to make identical determinations to the first three preconditions for the export of Appendix I species. Additionally, re-export certificates are required for the re-export of Appendix II specimens (art IV(5)), and introduction from the sea of any specimen of a species requires a certificate from a Management Authority of the State of introduction (art IV(6)).

(iii) *Permit monitoring and reporting*

As import permits are not required for Appendix II species, there is ‘no prerequisite to the issuing of an Appendix II export permit under Article IV’, which allows for trade in Appendix II specimens for commercial purposes (art IV(3)). Article IV(3) also requires the Scientific Authority in each Party to monitor both the export permits granted by that State for specimens of species included in Appendix II, as well as the actual exports of such specimens. Article IV(3) imposes an obligation on the Scientific Authorities of States Parties to ‘advise the appropriate Management Authority of suitable measures to be taken to limit the grant of export permits’ where it is determined that the population status of the species may be threatened.¹¹⁴

¹¹² Ibid 502.

¹¹³ Ibid.

¹¹⁴ Favre (n 84) 111 – 112.

(c) Appendix III

Appendix III contains species that are subject to regulation within the jurisdiction of a Party to the Convention ‘for the purpose of preventing or restricting exploitation’,¹¹⁵ and for which cooperation by other Parties is needed to control the trade (art II(3)). Appendix III provides a mechanism whereby any Party with domestic legislation for ‘regulating the export of species not listed in Appendix I or II can seek international help in enforcing its legislation’ (art XVI(1)).¹¹⁶ An important distinction between Appendix III and Appendices I and II is that no vote of the Parties is required to list the species on this Appendix – it is possible for ‘any Party to unilaterally amend Appendix III at any time simply by notifying the Secretariat’.¹¹⁷ The restrictions imposed on trade in Appendix III species are limited to specimens originating from the listing State,¹¹⁸ and considerably less stringent than the regulatory requirements for Appendices I and II.

1.3. Other provisions: reservations, exemptions and trade with Non-Party States

While it is beyond the scope of this chapter to provide a complete analysis of all of *CITES*’ provisions, certain articles are particularly relevant to the scope and strength of Party obligations.¹¹⁹ Article XIV(1), for instance, expressly provides that *CITES*’ provisions do not affect the right of each party to introduce stricter trading measures than are required by the Convention. This right has been exercised by several State Parties, especially Member States of the European Union.¹²⁰ In contrast, *CITES* also permits States Parties to enter specific reservations with regard to any of the species listed in the Appendices, which must be submitted ‘at the time of depositing an instrument of ratification, acceptance, approval, or accession by a State Party’ (art XXIII(2)). Until the reserving Party withdraws its reservation, it is treated as a Non-Party State to the Convention ‘with

¹¹⁵ Ibid 42.

¹¹⁶ Bowman, Davies, and Redgwell (n 31) 499.

¹¹⁷ Ibid.

¹¹⁸ Ibid 507.

¹¹⁹ Paul Matthews, ‘Problems related to the Convention on International Trade in Endangered Species’ (1996) 45(2) *International & Comparative Law Quarterly* 421, 424.

¹²⁰ Bowman, Davies, and Redgwell (n 31) 533.

respect to trade in a species, or parts, or derivatives specified in the reservation' (art XXIII(3)). States Parties are also treated as Non-Party States in relation to reservations to amendments adopted to Appendices I and II (art XV(3)), and in respect of changes to species listing under Appendix III (art XVI(2)). While States Parties are not required to provide any reasons or justification for taking reservations, they are typically made by Parties objecting to increased protection and thus enhanced trade controls of certain species.¹²¹ Article X concerns the regulation of trade between States Parties and Non-Party States, and provides that 'comparable documentation' which substantially conforms with the Convention's requirements for trade permits and certificates may be accepted from the Non- Party State engaged in such trade.

There are a number of other 'exemptions' where the permit and licensing requirements for the trade in species protected under the Convention are 'modified or excluded',¹²² including 'transit or transshipment' through or in the territory of a State Party while under customs control (art VII(1)), 'pre-Convention specimens' (art VII(2)), 'personal or household effects' (art VII(3)), as well as specimens exchanged for 'captive breeding and artificial propagation' (art VII(4), (5)) or other 'scientific and exhibition purposes' (art VII(6)). While some exemptions have been largely recognised as necessary to facilitate national wildlife management and conservation, others have been forcefully challenged as creating opportunities for abuse and exploitation.¹²³

2. Criminalisation of illegal wildlife trade

The significance of *CITES*' operation for combating the illegal wildlife trade is primarily related to the obligations imposed on States Parties for the enforcement of *CITES*, and the prohibition of trade in contravention of its provisions delineated above.¹²⁴ While *CITES* was not drafted and does not operate to criminalise or prosecute illegal wildlife trade as a form of 'wildlife crime' at the international level, Article VIII(1) of the Convention does require States Parties to take 'appropriate measures' to 'enforce the

¹²¹ Ibid 516.

¹²² Ibid 509.

¹²³ Ibid 513 – 515.

¹²⁴ Strydom (n 8) 271.

provisions of the Convention and to prohibit trade in specimens in violation thereof. Article VIII(1) specifically determines that such measures shall include the penalisation of trade or possession of CITES-listed specimens, and confiscation or return of specimens to the State of export. In addition to requiring the implementation of treaty obligations, Article VIII also obligates States Parties to maintain implementation records and provide periodic reports to the CITES Secretariat (art VIII(7)). This responsibility of States Parties is fundamental to enabling insight into the effectiveness of controls and compliance mechanisms.¹²⁵

Article VIII effectively requires each State Party to implement treaty obligations through domestic legislation.¹²⁶ This provision functions to create the transition between international obligations and the criminal law and regulations of States Parties.¹²⁷ Many scholars emphasise the incredibly general nature of the language used in Article VIII(1).¹²⁸ As highlighted by Favre, there are no ‘uniform provisions’ or ‘legislation models’ suggested for adoption by States Parties.¹²⁹ The inconsistencies and lack of uniformity between the different ‘measures’ adopted by States Parties to implement and enforce their obligations under *CITES* has been the subject of extensive criticism.¹³⁰ The essential argument raised by the majority of commentators is that reliance on States Parties to implement general ‘appropriate measures’ to enforce and ensure compliance with

125 James B Murphy, ‘Alternative Approaches to the Cites Non-Detriment Finding for Appendix II Species’ (2006) 36 *Environmental Law* 531, 537.

126 John B Heppes and Eric J McFadden, ‘The Convention on International Trade in Endangered Species of Wild Fauna and Flora: Improving the Prospects for Preserving Our Biological Heritage’ (1987) 5 *Boston University International Law Journal* 229, 237–238.

127 Ibid.

128 Ibid 237; Favre (n 84) 215; Carey (n 60) 1298.

129 Favre (n 84) 215.

130 See, for example, Aurelie Flore Koumba Pambo et al, ‘International Trade in Endangered Species: The Challenges and Successes of the 17th Conference of Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)’ (2016) 54(4) *African Journal of Ecology* 399, 402; Joel T Heinen and Diwakar P Chapgain, ‘On the Expansion of Species Protection in Nepal: Advances and Pitfalls of New Efforts to Implement and Comply with CITES’ (2002) 5(3) *Journal of International Wildlife Law and Policy* 235, 236–237; Kimberley Graham, ‘International Intent and Domestic Application of the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES): The Case of the Ocelot (*Leopardus pardalis*)’ (2017) 20(3–4) *Journal of International Wildlife Law & Policy* 253, 279; Wandesforde-Smith (n 15) 376.

CITES has resulted in the ‘pervasive inadequacy of national legislation’, which is explored in greater detail below.¹³¹

V. Administration

Administration of *CITES* refers to the implementation of the Convention’s provisions in relation to the regulation of international wildlife trade and criminalisation of illegal trade. The ‘elaborate nature of the administrative machinery’ established by the *CITES* regime has been emphasised by several commentators,¹³² including the effective cooperation and collaboration between the different administrative bodies.

1. International administration

The Conference of the Parties, or CoP for short, established under Article XI of the Convention, is the principal administrative and decision-making body for the implementation of *CITES*.¹³³ The Conference provides guidance and recommendations on the Convention’s operation and compliance mechanisms.¹³⁴ The recommendations of the CoP are issued as either Resolutions or Decisions.¹³⁵ Resolutions are intended to provide long-standing clarification on the implementation of certain provisions of *CITES*, while decisions are typically of a less permanent nature. Although these resolutions and decisions are only regarded as ‘soft law’,¹³⁶ the recommendations of the CoP have been integral in improving understanding of, and compliance with, Parties’ obligations under the

¹³¹ Carey (n 60) 1294 – 1295.

¹³² Bowman (n 62) 10.

¹³³ CITES Conference of the Parties, ‘CITES Strategic Vision: 2003 – 2013’, Resolution Conf. 14.2, discussed in Strydom (n 8) 272.

¹³⁴ Annecoos Wiersema, ‘CITES and the Whole Chain Approach to Combating Illegal Wildlife Trade’ (2017) 20(3 – 4) *Journal of International Wildlife Law & Policy* 207, 212 – 213; Rosalind Reeve, ‘Wildlife Trade, Sanctions and Compliance: Lessons from the CITES Regime (Convention on International Trade in Endangered Species of Wild Flora and Fauna)’ (2006) 82(5) *International Affairs* 881, 882.

¹³⁵ Bowman, Davies, and Redgwell (n 31) 488.

¹³⁶ *Ibid.*

Convention.¹³⁷ CoP Resolutions in particular effectively provide ‘concrete content to the broadly stated obligations’ in the text of the Convention.¹³⁸ Arguably one of the most significant roles of the CoP has been in guiding the progress and consistency of national implementation measures, which in turn has supported the capacity of States Parties to combat the illegal trade in wildlife.¹³⁹ This includes in particular the clarification the CoP has provided on issues such as transit/custom controls and document verification procedures, training and equipment guidelines for wildlife law enforcement professionals, as well as methods for improving cooperation between the government authorities and agencies responsible for *CITES* enforcement.¹⁴⁰

The roles and functions of the CoP are executed in conjunction with the *CITES* Secretariat,¹⁴¹ established under Article XII (art XVII). The *CITES* Secretariat performs various functions including the arrangement of Party meetings and preparation of numerous reports and draft resolutions.¹⁴² Key responsibilities of the *CITES* Secretariat include the collection and review of compliance data, as well as the publication of CoP recommendations and ‘Notifications to the Parties’. The third dimension to the international administration of *CITES* is the permanent committees established by the CoP to support the *CITES* Secretariat.¹⁴³ The Standing Committee is particularly significant,¹⁴⁴ as it provides policy and operational guidance to the Secretariat and CoP, but also has developed the function to respond to non-compliance through special reports, written cautions and warnings, compliance action plan requests, and finally, recommendations for the suspension of commercial or all trade with the non-compliance State Party.¹⁴⁵ The ability of the Standing Committee to effectively ‘penalise’ States Parties is cited by some authors as a powerful mechanism for

137 Wiersema (n 134) 212 – 213.

138 Bowman (n 62) 59.

139 Strydom (n 8) 272.

140 Ibid.

141 Ibid.

142 Wiersema (n 134) 212 – 213.

143 *CITES* Secretariat (n 18).

144 Sand (n 45) 38.

145 *CITES* Conference of the Parties, ‘*CITES* compliance procedures’, Resolution Conf. 14.3 [30].

enforcing Article VIII compliance obligations,¹⁴⁶ while others assert that the ‘threat of trade sanction against states for departures from treaty norms are more likely to be negotiated, extended, and forgiven on promise of more help, more money, and better behaviour in the future’.¹⁴⁷

2. Domestic administration

At the domestic level, the listing and permit requirements of the Convention are administered by the Management and Scientific Authorities of each State Party. The Management and Scientific Authorities of States Parties not only create a ‘global network of institutions’ dedicated to administering the Convention, but also provide the foundation for the implementation and enforcement of *CITES*’ provisions which regulate, restrict and eliminate forms of international trade in wildlife.¹⁴⁸ As highlighted in the earlier examination of the operation of *CITES*, the State authorities are responsible for considering the available scientific and trade data on a particular species when making a determination on whether or not the trade in question is a current or potential threat to the survival of the species.¹⁴⁹

VI. Experiences and critique

1. Contested approach to ecological conservation

CITES is widely regarded as the benchmark international agreement for the global conservation of endangered species of flora and fauna. Although the Convention was fundamentally drafted and implemented as a trade

¹⁴⁶ Karen N Scott, ‘Non-Compliance Procedures and the Implementation of Commitments under Wildlife Treaties’ in Michael Bowman, Peter Davies and Edward Goodwin (eds), *Research Handbook on Biodiversity and Law* (2016) 414, 419 – 420.

¹⁴⁷ Wandesforde-Smith (n 15) 369, citing Reeve (n 134) 881.

¹⁴⁸ Bowman, Davies, and Redgwell (n 31) 488, 489 – 490; Pervaze A Sheikh and M Lynne Corn, *The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)*, Research Report (2016) 5 [emphasis added].

¹⁴⁹ Bowman, Davies, and Redgwell (n 31) 488, 489 – 490.

agreement for the regulation of the international wildlife trade, many authors underscore that an inherent dimension to the *CITES* regime is to secure the conservation of vulnerable wildlife.¹⁵⁰

A strong challenge to this perspective has been raised by scholars who contend that recognition of even an indirect role of *CITES* in wildlife conservation is misplaced.¹⁵¹ A range of environmental justice and animal welfare activists underscore that while *CITES* may ‘protect’ endangered wildlife to the extent that it restricts and eliminates trade in certain species, the Convention nonetheless operates to legalise commercial trade in multiple thousands of species listed on Appendix II.¹⁵² Bowman, for example, stresses that while the text of the Convention imposes stringent welfare obligations on States Parties, these

The anthropocentric values underlying international ‘conservation’ treaties and the commodification of wildlife are contested by legal and conservation scholars on the basis of ethical and animal welfare grounds,¹⁵³ but also due to the consequences for environmental and wildlife crime.¹⁵⁴ One of the most serious ramifications of the sustainable use principle and the legalisation of trade in wildlife and their derivatives is the creation of parallel ‘black markets’ for the illegal trafficking and trade in endangered species.¹⁵⁵ Several commentators have addressed the

150 Trouwborst et al (n 20) 784; Lindsay Stringer, ‘Moving Towards Sustainability? An Analysis of *CITES*’ Conservation Policies’ (2011) 21(4) *Environmental Policy and Governance* 240, 242; Timothy Hodgetts, ‘Improving the Role of Global Conservation Treaties in Addressing Contemporary Threats to Lions’ (2018) 27(1) *Biodiversity and Conservation* 2747, 2748 – 2749.

151 Jon Hutton and Barnabas Dickson (eds), *Endangered Species Threatened Convention: The Past, Present and Future of CITES* (2000) xv.

152 Helen Kopnina, ‘Wild Animals and Justice: The Case of the Dead Elephant in the Room’ (2016) 19 *Journal of International Wildlife Law and Policy* 219, 222 – 223; Nancy Lee Peluso, ‘Coercing Conservation?: The Politics of State Resource Control’ (1993) 3(2) *Global Environmental Change* 199, 201; Sian Sullivan, ‘Elephant in the Room? Problematising ‘New’ (Neoliberal) Biodiveristy Conservation’ (2011) 33(1) *Forum for Development Studies* 105, 105.

153 See, for example, Alexander Gillespie, *International Environmental Law, Policy, and Ethics* (2nd ed, 2014) 13; and Rachelle Adams, ‘Delegitimising Ivory: The Case for an Ivory Trade Ban Treaty’ (2014) 108 *American Journal of International Law Unbound* 166, 166 – 167.

154 Keith (n 1) 545; Wiersema (n 134) 217 – 218; Kristen Conrad, ‘Trade Bans: A Perfect Storm for Poaching?’ (2012) 5(3) *Tropical Conservation Science* 245, 245 – 254.

155 Keith (n 1) 545; Wiersema (n 134) 217 – 218; Conrad (n 154) 245.

relationship between trends and characteristics of the illegal wildlife trade and the various exemptions and reservations allowed by *CITES*, as well as the substantial links between legalised markets, trade restrictions and the increased demand for wildlife parts and products.¹⁵⁶ The critiques aimed at the Convention's approach to ecological and biodiversity conservation nevertheless provide strong arguments as to how certain aspects of the *CITES* regime actually exacerbate wildlife trafficking and the demand for illegal trade.¹⁵⁷ However, the author determines that it would be incorrect and dismissive to conclude that *CITES* has had no positive contributions to the preservation of wildlife populations.¹⁵⁸ While of course it would be inaccurate to conclude that the permit system operates 'perfectly', the elaborate administrative structure of the Convention has proven effective in facilitating regular oversight and review of species' trade and conservation status.

2. Narrow scope and coverage

Perhaps the most common argument raised against the role of *CITES* in relation to international responses against the illegal wildlife trade is the fact that *CITES* is restricted to the regulation and enforcement of international trade. The Convention does not address or extend to the diverse range of other threats to wildlife preservation, such as habitat loss, climate change, pollution/hazardous waste, or animal cruelty.¹⁵⁹ Critically, the Convention does not explicitly refer or include any express provisions relevant to the illegal wildlife trade, or wildlife crime, beyond the extent to which it requires States Parties to implement 'appropriate measures' at the domestic level.

This critique of *CITES'* role in international responses against wildlife crime is often countered by arguments regarding the flexibility of the Convention's administrative bodies and institutional mechanisms to extend its focus to

¹⁵⁶ Adams (n 156) 166 – 167; Keith (n 1) 545; Joseph Vandegrift, 'Elephant Poaching: CITES Failure to Combat the Growth in Chinese Demand for Ivory' (2013) 31 *Virginia Environmental Law Journal* 102, 102 – 103.

¹⁵⁷ Keith (n 1) 545.

¹⁵⁸ See, for example, Carey (n 60) 1294 – 1295; Graham (n 130) 279.

¹⁵⁹ Ong (n 16) 520.

the phenomenon of global wildlife crime.¹⁶⁰ A number of authors stress that the responses of *CITES* to the illegal wildlife trade cannot simply be determined by reference to the text of the Convention,¹⁶¹ and highlight the increasing prominence of the *CITES* Secretariat and CoP in providing guidance and recommendations specific to wildlife crime.¹⁶² Numerous resolutions have been issued by the CoP in relation to wildlife crime, including Resolution Conf. 17.4 on *Demand reduction strategies to combat illegal trade in CITES-listed species*, Resolution Conf. 16.6 (Rev CoP17) on *Prohibiting, preventing, detecting and countering corruption, which facilitates activities conducted in violation of the Convention*, and Resolution Conf. 11.3 (Rev CoP17) on *Compliance and enforcement*. The relevance and importance of *CITES* as part of international action for preventing and suppressing wildlife crime has also been underscored in two UN General Assembly Resolutions,¹⁶³ which recognised the role of *CITES* as the primary international legal framework to counteract wildlife crime, and its contributions in other UN and non-governmental responses.

3. Challenges to enforcement and compliance

In discussing the provisions of *CITES* pertaining to the prohibition and penalisation of international trade in contravention of its provisions, it has already been highlighted that the enforcement of the Convention is constrained to the domestic level. Geoffrey Wandesforde-Smith determines that the inability of *CITES* to effectively respond to the illegal international wildlife trade is as simple as the fact the Convention requires implementation and enforcement through domestic legislation.¹⁶⁴ He stresses that the only ‘real power’ to combat the threat and consequences of the illegal wildlife trade lies with ‘domestic law, domestic police and

¹⁶⁰ Keith (n 1) 548.

¹⁶¹ Wiersema (n 134) 212 – 214.

¹⁶² Lorraine Elliott, ‘Fighting Transnational Environmental Crime’ (2012) 66(1) *Journal of International Affairs* 87, 97.

¹⁶³ UN General Assembly, *Tackling Illicit Trafficking in Wildlife*, UN Doc A/RES/69/314 (19 August 2015); UN General Assembly, *Tackling Illicit Trafficking in Wildlife*, UN Doc A/RES/71/326 (28 September 2017).

¹⁶⁴ Wandesforde-Smith (n 15) 369; Michael Glennon, ‘Has International Law Failed the Elephant?’ (1990) 84 *American Journal of International Law* 1, 30 – 31.

rangers, domestic prosecutors, domestic courts, and domestic conservation bureaucracies'.¹⁶⁵ Despite the progress of the CITES Secretariat and CoP in facilitating guidance and mechanisms to support consistent national implementation of *CITES* obligations, it remains the case that approximately half of the State Parties to the Convention 'have not implemented appropriate measures at the national level for the enforcement of the Convention's provisions'.¹⁶⁶ It is important to clarify that the vast majority of multilateral environmental agreements and other environmental or wildlife treaties are not self-executing, and also do not provide for enforcement mechanisms at the international level.¹⁶⁷ Thus, *CITES* is not in any sense exceptional in requiring States Parties to implement domestic enforcement provisions.

However, there is significant concern within the literature that the gravity of the wildlife trafficking problem has moved beyond 'mere attempts' to achieve consistent and operational compliance with *CITES*' provisions.¹⁶⁸ On the issue of enforcement, Wandesforde-Smith as well as John Heppes and Eric McFadden emphasise that there is an even more serious problem with enforcing the legislative provisions adopted by States Parties.¹⁶⁹ Lack of human capacity and economic resources across all States Parties is a chronic weakness, especially so in developing countries where even in the 'rare instances when prosecutions are brought and cases tried',¹⁷⁰ underlying problems associated with forensic and judicial processes results in dismissals, waived fines, and reduced or suspended sentences.¹⁷¹ Overall, there are very weak prospects for the implementation of 'international legal standards for the protection of endangered species' in the legal and judicial systems of States Parties, notwithstanding the substantial focus and efforts of the *CITES* administration.¹⁷² Despite the pervasive global threat of wildlife trafficking, it is clear that the limited political will and

¹⁶⁵ Wandesforde-Smith (n 15) 369.

¹⁶⁶ Strydom (n 8) 272; Bowman (n 62) 59–60.

¹⁶⁷ Schaedla (n 5) 59.

¹⁶⁸ Strydom (n 8) 275–276; Wandesforde-Smith (n 15) 377–378.

¹⁶⁹ Wandesforde-Smith (n 15) 378; Heppes and McFadden (n 126) 237–238.

¹⁷⁰ Wandesforde-Smith (n 15) 378.

¹⁷¹ See, for example, Heinen and Chapagain (n 130) 235; Niiman (n 5) 1101.

¹⁷² Wandesforde-Smith (n 15) 380–381; Heinen and Chapagain (n 130) 238–239.

commitment of States Parties undermines the effectiveness of *CITES* as a regulatory mechanism.¹⁷³

VII. The way ahead, conclusion

The prominent recommendations for the future role of *CITES* are often presented in the context of the critiques of the Convention's operation and relevance to combating the illegal wildlife trade raised above. It is clearly apparent that leading scholars, experts and professionals highlight valid criticisms and obstacles associated with the role of *CITES* in combating the illegal trade in endangered species of wild flora and fauna. It is 'widely known and repeatedly emphasised', notes Hennie Strydom, that the Convention is constrained in any contributions to preventing and suppressing wildlife crime as a result of its limited scope and application to the regulation of international trade, and reliance on national legislation and enforcement mechanisms to ensure compliance.¹⁷⁴ Thus, the majority of authors determine that any future or enhanced role for *CITES* in responding to the complex scale and threat of the illegal wildlife trade requires improving strategic cooperation with other critical environmental and criminal frameworks relevant to combating wildlife crime. To this end, there is an increasing focus on opportunities to enhance collaboration with existing multilateral instruments including the 1992 *Convention on Biological Diversity*, the 1972 *Convention Concerning the Protection of World Cultural and Natural Heritage*, the 2000 *UN Convention against Transnational Organised Crime*, and the 2003 *UN Convention against Corruption*.¹⁷⁵

There has been extensive academic debate about how national laws and criminal law responses of States Parties could be harmonised. However, in recent years there is growing recognition that consistent and powerful

¹⁷³ Duncan Brack, 'The Growth and Control of International Environmental Crime' (2004) 112(2) *Environmental Health Perspectives* A80, A80–81.

¹⁷⁴ Strydom (n 8) 285.

¹⁷⁵ Ibid 276; Elliott (n 162) 97; Hutton and Dickson (n 151) 125; Richard Caddell, 'Inter-Treaty Cooperation, Biological Diversity and the Trade in Endangered Species' (2013) 22 *Review of European Community and International Environmental Law* 264, 264–280; Hodgetts (n 150) 2747.

international enforcement responses to wildlife crime may ultimately require the adoption and implementation of a multilateral convention that is specific to preventing and suppressing wildlife crime.¹⁷⁶ While a specific convention with effective monitoring and enforcement mechanisms would require significant political will and agreement, it is very clear that the illegal wildlife trade, and other associated forms of wildlife crime, present too significant of a threat to ignore.

In conclusion, the author stresses that despite the limitations of *CITES*' role in the fight against wildlife crime, it does remain the only international legal instrument to facilitate any action against the unsustainable and illicit international trade in endangered species. *CITES* imposes rigorous and substantive obligations on States Parties, and has also established intricate administrative machinery in order to monitor both trade levels and the implementation of necessary enforcement measures through national legislation.¹⁷⁷ Thus, in the absence of any other long-term and binding commitments to counteract the illegal wildlife trade, the author urges continued scholarship and analysis as to how the international frameworks for combating wildlife crime can be strengthened at all levels of governance and enforcement.

Bibliography

- Adams, Rachele, 'Delegitimising Ivory: The Case for an Ivory Trade Ban Treaty' (2014) 108 *American Journal of International Law Unbound* 166
- Anderson, Chandler P et al, 'The North Pacific Sealing Convention' (1911) 5(4) *American Journal of International Law* 1025
- Bhargava, Michael, 'Of Otters and Orcas: Marine Mammals and Legal Regimes in the North Pacific' (2005) 32(4) *Ecology Law Quarterly* 939
- Bowman, Michael, 'Conflict or Combability? The Trade, Conservation and Animal Welfare Dimensions of CITES' (1998) 1(1) *Journal of International Law & Policy* 9

¹⁷⁶ John E Scanlon, 'Do We Need a Wildlife Crime Convention?', *WildAID* (Web page, 20 February 2019); Wandesforde-Smith (n 15) 380–381.

¹⁷⁷ Bowman (n 62) 10.

- Bowman, Michael, 'Environmental Protection and the Concept of Common Concern of Mankind' in Malgosia Fitzmaurice, David M Ong and Panos Merkouris (eds), *Research Handbook on International Environmental Law*, Cheltenham: Edward Elgar, 2010, 493
- Bowman, Michael, 'The Nature, Development and Philosophical Foundations of the Biodiversity Concept in International Law' in Michael Bowman and Catherine Redgwell (eds), *International Law and the Conservation of Biological Diversity*, London: Kluwer Law International, 1996, 5
- Bowman, Michael, Peter Davies and Catherine Redgwell, *Lyster's International Wildlife Law*, Cambridge: Cambridge University Press, 2nd ed, 2011
- Brack, Duncan, 'The Growth and Control of International Environmental Crime' (2004) 112(2) *Environmental Health Perspectives* A80
- Burns, William C, 'CITES and the Regulation of International Trade in Endangered Species of Flora: A Critical Appraisal' (1990) 8(2) *Penn State International Law Review* 202
- Caddell, Richard, 'Inter-Treaty Cooperation, Biological Diversity and the Trade in Endangered Species' (2013) 22 *Review of European Community and International Environmental Law* 264
- Carey, Jay E, 'Improving the Efficacy of CITES by Providing the Proper Incentives to Protect Endangered Species' (1999) 77(4) *Washington University Law Review* 1291
- Challender, Daniel, Stuart Harrop and Douglas MacMillan, 'Understanding Markets to Conserve Trade Threatened Species in CITES' (2015) 187 *Biological Conservation* 249
- Chamberlin, John Martin, 'Wildlife Crime' in Margaret E Beare (ed), *Encyclopedia of Transnational Crime & Justice*, Thousand Oaks, CA: SAGE, 2012, 467
- Cheung, Julie, 'Implementation and Enforcement of CITES: An Assessment of Tiger and Rhinoceros Conservation Policy in Asia' (1995) 5(1) *Pacific Rim Law & Policy Journal* 125
- Ciavaglia, Sherryn et al, 'Current Issues with the Investigation of Wildlife Crime in Australia: Problems and Opportunities for Improvement' (2015) 18(3) *Journal of International Wildlife Law & Policy* 244
- CITES Secretariat, 'List of Contracting Parties' (Web page, 14 January 2020) <<https://cites.org/eng/disc/parties/chronolo.php>>
- CITES Secretariat, 'The CITES Species' (Web page, 2 January 2017) <<https://www.cites.org/eng/disc/species.php>>

- CITES Secretariat, 'The International Consortium on Combating Wildlife Crime', *Wildlife Crime* (Web page, undated) <<https://www.cites.org/eng/prog/iccwc.php/Wildlife-Crime>>
- Conrad, Kristen, 'Trade Bans: A Perfect Storm for Poaching?' (2012) 5(3) *Tropical Conservation Science* 245
- Elliott, Lorraine, 'Fighting Transnational Environmental Crime' (2012) 66(1) *Journal of International Affairs* 87
- Favre, David S, *International Trade in Endangered Species: A Guide to CITES*, Dordrecht: Martinus Nijhoff, 1989
- Garrison, John L, 'The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Debate over Sustainable Use' (1994) 12(1) *Pace Environmental Law Review* 301
- Gibbs, Carole et al, 'Introducing Conservation Criminology: Towards Interdisciplinary Scholarship on Environmental Crimes and Risks' (2010) 50(1) *British Journal of Criminology* 124
- Gillespie, Alexander, *Conservation, Biodiversity and International Law*, Cheltenham: Edward Elgar, 2nd ed, 2014
- Glennon, Michael, 'Has International Law Failed the Elephant?' (1990) 84 *American Journal of International Law* 1
- Graham, Kimberley, 'International Intent and Domestic Application of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES): The Case of the Ocelot (*Leopardus pardalis*)' (2017) 20 (3 – 4) *Journal of International Wildlife Law & Policy* 253
- Heinen, Joel and Diwakar Chapagain, 'On the Expansion of Species Protection in Nepal: Advances and Pitfalls of New Efforts to Implement and Comply with CITES (2002) 5 *Journal of International Wildlife Law and Policy* 235
- Heppes, John B and Eric J McFadden, 'The Convention on International Trade in Endangered Species of Wild Fauna and Flora: Improving the Prospects for Preserving Our Biological Heritage' (1987) 5 *Boston University International Law Journal* 229
- Hodgetts, Timothy, 'Improving the Role of Global Conservation Treaties in Addressing Contemporary Threats to Lions' (2018) 27(1) *Biodiversity and Conservation* 2747
- Hutton, Jon and Barnabas Dickson (eds), *Endangered Species Threatened Convention: The Past, Present and Future of CITES*, London: Earthscan, 2000

- INTERPOL, *Global Wildlife Enforcement: Strengthening Law Enforcement Cooperation Against Wildlife Crime*, Lyon: INTERPOL, March 2019
- IUCN, *Proceedings of the 8th Session of the General Assembly*, 1963
- Ivory, Radha, 'Corruption Gone Wild: Transnational Criminal Law and the International Trade in Endangered Species' (2017) 111 *AJIL Unbound* 413
- Janssens, Bram and Arie Trouwborst, 'Rhinoceros Conservation and International Law: The Role of Wildlife Treaties in Averting Megaherbivore Extinction' (2018) 21(2–3) *Journal of International Wildlife Law & Policy* 146
- Johnson, Rebecca N, 'The Use of DNA Identification in Prosecuting Wildlife-Traffickers in Australia: Do the Penalties Fit the Crime?' (2010) 6(3) *Forensic Science, Medicine, and Pathology* 211
- Keith, Angad, 'Hunting for Efficacy: A Critical Evaluation of International Response to Wildlife Trafficking in the African Great Lakes Region' (2018) 35 *Environmental and Planning Law Journal* 542
- Kideghesho, Jafari R, 'Reversing the Trend of Wildlife Crime in Tanzania: Challenges and Opportunities' (2016) 25(3) *Biodiversity and Conservation* 427
- Kopnina, Helen, 'Wild Animals and Justice: The Case of the Dead Elephant in the Room' (2016) 19 *Journal of International Wildlife Law and Policy* 2019
- Kosloff, Laura H and Mark C Trexler, 'The Convention on International Trade in Endangered Species: No Carrot, but Where's the Stick?' (1987) 17 *Environmental Law Reporter* 10222
- Koumba Pambo, Aurelie Flore et al, 'International Trade in Endangered Species: The Challenges and Successes of the 17th Conference of Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)' (2016) 54(4) *African Journal of Ecology* 399
- Kriepps, Catherine L, 'Sustainable Use of Endangered Species under CITES: Is It a Sustainable Alternative?', (1996) 17(1) *University of Pennsylvania Journal of International Law* 461
- Lanchbery, John, 'Long-Term Trends in Systems for Implementation Review in International Agreements on Fauna and Flora' in David G Victor, Kal Raustiala and Eugene B Skolnikoff (eds), *The Implementation and Effectiveness of International Environmental Commitments: Theory and Practice*, Cambridge, MS: MIT Press, 1998, 57
- Linlin Li and Zhigang Jiang, 'International Trade of CITES Listed Bird Species in China' (2014) 9(2) *PLoS ONE* [s.p.]

- Lyster, Simon, *International Wildlife Law*, Cambridge, MA: Grotius, 1985
- Marshall, Lynn P, 'Canada's Implementation of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (Cites): The Effect of the Biodiversity Focus of International Environmental Law' (1999) 9 *Journal of Environmental Law and Practice* 31
- Matthews, Paul, 'Problems related to the Convention on the International Trade in Endangered Species' (1996) 45(2) *International & Comparative Law Quarterly* 421
- Murphy, James B, 'Alternative Approaches to the Cites Non-Detriment Finding for Appendix II Species, (2006) 36 *Environmental Law* 531
- Nellemann, Christian et al (eds), *The Environment Crime Crisis: Threats to Sustainable Development from Illegal Exploitation and Trade in Wildlife and Forest Resources*, Arendal: GRID/UNEP, 2014
- Niiman, Vincent, 'An Overview of International Wildlife Trade from Southeast Asia' (2010) 19(4) *Biodiversity and Conservation* 1101
- Nijman, Vincent and Chris R Shepherd, 'The Role of Thailand in the International Trade in CITES-Listed Live Reptiles and Amphibians' (2011) 6(3) *PLoS ONE* [s.p.]
- OECD, *Illegal Trade in Environmentally Sensitive Goods*, Paris: OECD Publishing, 2012
- Ong, David M, 'International Environmental Law Governing Threats to Biological Diversity' in Malgosia Fitzmaurice, David M Ong and Panos Merkouris (eds), *Research Handbook on International Environmental Law*, Cheltenham: Edward Elgar Publishing, 2010, 519
- Peluso, Nancy Lee, 'Coercing Conservation?: The Politics of State Resource Control' (1993) 3(2) *Global Environmental Change* 199
- Reeve, Rosalind, 'Wildlife Trade, Sanctions and Compliance: Lessons from the CITES Regime' (2006) 82(5) *International Affairs* 881
- Sand, Peter, 'Whither CITES? The Evolution of a Treaty Regime in the Borderland of Trade and Environment' (1997) 1 *European Journal of International Law* 29
- Scanlon, John E, 'Do We Need a Wildlife Crime Convention?', *WildAID* (Web page, 20 February 2019) <<https://wildaaid.org/do-we-need-a-wildlife-crime-convention/>>
- Schaedla, William H, 'Local Sociocultural, Economic and Political Factors of Transnational Wildlife Crime' in Lorraine Elliott and William H Schaedla (eds),

- Handbook of Transnational Environmental Crime*, Cheltenham: Edward Elgar Publishing, 2016, 45
- Scott, Karen N, 'Non-Compliance Procedures and the Implementation of Commitments under Wildlife Treaties' in Michael Bowman, Peter Davies and Edward Goodwin (eds), *Research Handbook on Biodiversity and Law*, Cheltenham: Edward Elgar Publishing, 2016, 414
- Sheikh, Pervaze and Lynne Corn, *The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)*, Research Report, Washington, DC: United States Congressional Research Service, 2016
- Stringer, Lindsay, 'Moving Towards Sustainability? An Analysis of CITES' Conservation Policies' (2011) 21(4) *Environmental Policy and Governance* 240
- Strydom, Hennie, 'Transnational Organised Crime and the Illegal Trade in Endangered Species of Wild Fauna and Flora' in Pierre Hauck and Sven Peterke (eds), *International Law and Transnational Organised Crime*, Oxford: Oxford University Press, 2016, 264
- Sullivan, Sian, 'Elephant in the Room? Problematising 'New' (Neoliberal) Biodiveristy Conservation' (2011) 33(1) *Forum for Development Studies* 105
- Symes, William S et al, 'The Gravity of Wildlife Trade' (2017) 218 *Biological Conservation* 268
- Taylor, Andrew et al, 'Sustainable Rhino Horn Production at the Pointy End of the Rhino Horn Trade Debate' (2017) 216 *Biological Conservation* 60
- Thorson, Erica and Chris Wold, *Back to Basics: An Analysis of the Purpose of CITES and a Blueprint for Implementation*, Portland, OR: International Environmental Law Project, Lewis & Clark Law School, 2010
- Trouwborst, Arie et al, 'International Wildlife Law: Understanding and Enhancing Its Role in Conservation' (2017) 67(9) *Bioscience* 784
- UN, *The Future We Want*, Outcome Document of the United Nations Conference on Sustainable Development, Rio de Janeiro, Brazil 20 – 22 June 2012, New York, NY: United Nations
- UNEP, *Analysis of the Environmental Impacts of Illegal Trade in Wildlife*, UNEP/EA.2/INF/28, 2016
- UNODC, *Wildlife and Forest Crime Analytic Toolkit*, New York, NY: United Nations, rev ed 2012
- UNODC, *World Wildlife Crime Report: Trafficking in Protected Species*, New York, NY: United Nations, 2016

Vandegrift, Joseph, 'Elephant Poaching: CITES Failure to Combat the Growth in Chinese Demand for Ivory' (2013) 31 *Virginia Environmental Law Journal* 102

Walden Walsh, Barry, 'Convention on International Trade in Endangered Species of Wild Fauna and Flora: A CITES Timeline' (2005) 26(1–2) *Selbyana* 92

Wandesforde-Smith, Geoffrey, 'Looking for Law in All the Wrong Places? Dying Elephants, Evolving Treaties, and Empty Threats' (2016) 19(4) *Journal of International Wildlife Law & Policy* 365

Warchol, Greg L, 'The Transnational Illegal Wildlife Trade' (2004) 17(1) *Criminal Justice Studies* 57

Wasser, Samuel K et al, 'Combating the Illegal Trade in African Elephant Ivory with DNA Forensics' (2008) 22(4) *Conservation Biology* 1065

Wiersema, Annecoos, 'CITES and the Whole Chain Approach to Combating Illegal Wildlife Trade' (2017) 20(3) *Journal of International Wildlife Law and Policy* 207

Chapter Seven

The Role of the Convention on Biological Diversity in Combatting Wildlife Trafficking

NADJA LAZAR

Conserving biological diversity is a complex task and requires a multi-disciplinary approach. Wildlife trafficking is one of the problems endangering biological diversity. The *Convention on Biological Diversity* is an international treaty and aims at protecting biological diversity as a whole. It offers instruments that are meant to consider many of the reasons for the decline in biological diversity such as wildlife trafficking. Through domestic implementation the goals of the *Convention on Biological Diversity* are translated into national guidelines and laws. To successfully prevent wildlife trafficking it is necessary to make use of the full potential of the *Convention on Biological Diversity* and tackle the problems on the grounds of legal, environmental, as well as ethical considerations.

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I. Introduction

There is widespread agreement that wildlife trafficking and associated forms of ‘wildlife crime’ pose a serious threat to biological diversity.¹ Demand for plants, animal parts and other derivatives threatens thousands of wild species of flora and fauna.² One of the pervasive consequences of wildlife trafficking is that numerous species becoming threatened with endangerment or extinction.³

A critical component to addressing wildlife trafficking on a global scale is to enhance the protection of biological diversity.⁴ This chapter examines the role of the *Convention on Biological Diversity* in relation to wildlife trafficking.⁵ Specifically, this chapter evaluates the present and potential ability of the *Convention on Biological Diversity* to prevent loss in biodiversity caused by wildlife trafficking. This chapter shows that whether States Parties to the Convention will implement internal measures to prevent and suppress wildlife trafficking primarily depends on the internal politics and priorities of the state in question.⁶

Part II of this chapter provides a discussion of the meaning of biodiversity in the context of the *Convention on Biological Diversity*. In addition, this part addresses the relationship between biodiversity loss and wildlife trafficking. Part III provides a detailed review of the aims and structural elements of the *Convention on Biological Diversity*, including its implementation and relationship with other relevant international conventions, especially the *Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)*.⁷ Part IV assesses the current problems which impede the effective prevention of wildlife trafficking, and offers insights as to how the *Convention on Biological Diversity* may contribute to the international and domestic responses against wildlife trafficking.

1 UNODC, *World Wildlife Crime Report, Trafficking in Protected Species* (2016) 3.

2 Ibid.

3 Ibid.

4 Ibid.

5 Opened for signature 5 June 1992, 1760 UNTS 79 (entered into force 29 December 1993)

6 Kai Ching-Cha, *Can the Convention on Biological Diversity Save the Siberian Tiger?* (2001) 24(2) *Environmental Law and Policy Journal* 3, 24.

7 Opened for signature 3 March 1973, 993 UNTS 14537 (entered into force 1 July 1975).

II. Context

1. Protecting biological diversity

Biodiversity under the *Convention on Biological Diversity* refers to the entire range of life existing on this planet, including ecosystems, plants, animals, and micro-organisms. Biodiversity also comprises the diversity of species, the genetic differences between species, and the variety of ecosystems.⁸

Biodiversity provides indispensable services for society.⁹ Only the various forms of life and their interrelatedness have made earth habitable.¹⁰ Biodiversity provides essential necessities for human life, such as clean air, water, food, natural medicines, fertile soil, and other natural resources.¹¹

There are scientific, economic, and ethical components associated with the protection of global biodiversity.¹² Clearly, from an economic perspective, significant value can be placed on the natural environment in terms of services it provides to humans.¹³ The conservation of biological diversity is said to be an economically sound investment.¹⁴ The decline, respectively the permanent extinction of certain species and subspecies comes at much a greater cost in comparison.¹⁵

8 *Convention on Biological Diversity*, art 2(1); Secretariat of the Convention on Biological Diversity, *Handbook of the Convention on Biological Diversity Including its Cartagena Protocol on Biosafety* (3rd ed, 2005) xv.

9 Secretariat of the Convention on Biological Diversity, *Sustaining Life on Earth, How the Convention on Biological Diversity Promotes Nature and Human Well-being* (April 2000) 3.

10 Ibid.

11 Switzerland, Bundesamt für Umwelt (BAFU), *Biodiversität in der Schweiz ist unter Druck* (Web page, 19 July 2017); C Nellemann et al (eds), *The Environmental Crime Crisis, Threats to Sustainable Development from Illegal Exploitation and Trade in Wildlife and Forest Resources*, A UNEP Rapid Response Assessment (2014) 13; Secretariat of the Convention on Biological Diversity (n 8) xv.

12 BAFU (n 11).

13 Ibid.

14 Ibid.

15 Ibid.

2. The impact of wildlife trafficking on biological diversity

Global biodiversity loss caused by wildlife crimes, including wildlife trafficking, is comparable to other environmental threats such as global warming and pollution.¹⁶ The pervasive impact of wildlife trafficking includes, inter alia, the poaching and killing of wild species of flora and fauna, the introduction of non-native species through transportation, and through the spread of disease carried in wild species and products. The exploitation of the natural environment by humans is directly linked to the endangerment and extinction of many animal and plant species.¹⁷

All ecosystems depend on the interaction between animals and plants.¹⁸ For example, animals act as carriers of plant seeds by transporting microbes through fur, feathers or digestive tracts.¹⁹ Additionally, water quality, dung removal, the carbon cycle, decomposition and pollination of plants may be affected by the loss of biological diversity.²⁰ Amphibians, for instance, contribute to high water quality,²¹ mammals crush seeds,²² dung beetles remove dung²³, worms tend to the carbon cycle,²⁴ seabirds enable

16 David Hooper et al, 'A global synthesis reveals biodiversity loss as a major driver for ecosystem change' (2012) 486 *Nature* 105, 105.

17 Anthony D Barnosky, 'Has the Earth's sixth mass extinction already arrived?' (2011) 471 *Nature* 51, 51.

18 Bradley J Cardinale et al, 'Biodiversity loss and its impact on humanity' (2012) 486 *Nature* 59, 62.

19 See Colin Tudge, *The Tree, A Natural History of What Trees Are, How They Live, and Why They Matter* (2005) 22; see also Stephen R Kellert and Edward O Wilson, *The Biophilia Hypothesis* (1993) 33.

20 Daan P van Uhm, *The Illegal Wildlife Trade: Inside the World of Poacher, Smugglers and Traders* (2016) 20.

21 M R Whiles, 'Disease-Driven Amphibian Declines Alter Ecosystem Process in a Tropical Stream' (2013) 16(1) *Ecosystems* 146, 147.

22 Justin P Wright, Clive G Jones and Alexander S Flecker, 'An Ecosystem Engineer, the Beaver, Increases Species Richness at the Landscape Scale' (2002) 132(1) *Oecologia* 96, 97.

23 Elenor M Slade, Darren J Mann and Owen T Lewis, 'Biodiversity and Ecosystem Function of Tropical Forest Dung Beetles Under Contrasting Logging Regimes' (2011) 144(1) *Biological Conservation* 166, 172.

24 J E Barrett et al, 'Decline in a Dominant Invertebrate Species Contributes to Altered Carbon Cycling in a Low-Diversity Soil Ecosystem' (2008) 14(8) *Global Change Biology* 1734, 1734 – 1744.

decomposition, and birds help pollinate plants.²⁵ Each creature plays an important role in the proper functioning of an ecosystem. As a result of the interdependencies between all organisms within an ecosystem, the disappearance of one animal species, or the anthropogenous addition of a new species to a particular ecosystem, has critical ramifications.²⁶

Furthermore, it is acknowledged that the impact of wildlife trafficking extends beyond environmental consequences.²⁷ Wildlife trafficking also results in the loss of state revenue and economic opportunities for developing countries.²⁸ Due to the relationship between wildlife trafficking and organised crime, the profits associated with wildlife trafficking are often obtained by organised crime networks.²⁹ Wildlife trafficking can thus threaten the economy, livelihoods, good governance, and the rule of law.³⁰ Ultimately, wildlife trafficking hinders the achievement of sustainable development and environmental sustainability,³¹ both of which are objectives of the *Convention on Biological Diversity*.³²

Risks may also arise through the enactment of regulations governing the legal trade, for example under *CITES*.³³ Such regulations could lead to the aggravation of wildlife trafficking, as the mere existence of a legal market offers options to infiltrate wildlife illegally.³⁴ Wildlife trafficking is also inevitably linked to concerns surrounding animal cruelty.³⁵

25 Sandra H Anderson et al, 'Cascading Effects of Bird Functional Extinction Reduce Pollination and Plant Density' (2011) 331 (6020) *Science* 1068, 1068 – 1071.

26 See Tudge (n 19) 22; see also Kellert and Wilson (n 19) 33.

27 Nellemann et al (eds) (n 11) 4.

28 Ibid.

29 Ibid.

30 Ibid.

31 Ibid.

32 *Convention on Biological Diversity* art 1.

33 Ranee Khooshie Lal Panjabi, 'For Trinkets, Tonics and Terrorism: International Wildlife Poaching in the Twenty-First Century' (2014) 43(1) *Georgia Journal of International and Comparative Law* 1, 15.

34 Ibid.

35 Clifton P Flynn, 'Hunting and Illegal Violence against Humans and Other Animals, Exploring the Relationship' (2002) 10(2) *Society & Animals* 137, 151; Piers Beirne, 'For a Nonspeciesist Criminology: Animal Abuse as an Object of Study' (1999) 37(1) *Criminology* 117, 124.

The impact of wildlife trafficking are not constrained by state borders.³⁶ The continuing decline in species demonstrates that existing control mechanisms such as trade regulations in threatened and endangered species are not adequate to address the ongoing impacts of wildlife trafficking.³⁷

III. Characteristics of the Convention

1. Purposes and content

The *Convention on Biological Diversity* represents the first global agreement which considers all aspects of biological diversity.³⁸ The Convention has been described as the key instrument for the conservation and sustainable use of biodiversity.³⁹ States Parties to the Convention commit to undertake national and international measures aimed at the three purposes of the *Convention on Biological Diversity*: the conservation of biological diversity, the sustainable use of its components, and the equitable sharing of benefits arising out of the utilization of genetic resources.⁴⁰

The *Convention on Biological Diversity* is a framework agreement.⁴¹ The provisions under the Convention are mostly expressed as overall goals and policies which can be adjusted to domestic legal systems.⁴² Besides substantive provisions, some of which are dealt with in more detail below, the *Convention on Biological Diversity* also provides for institutional arrangements with regard to further development and for monitoring the implementation of the Convention.⁴³ The *Convention on Biological Diversity* provides for three bodies in particular: the Conference

36 Ulrich Beck, 'Living in the world risk society' (2006) 35(3) *Economy and Society* 329, 334.

37 Van Uhm (n 20) 23.

38 Lyle Glowka et al and IUCN, *A Guide to the Convention on Biological Diversity* (2nd ed, 1994) ix.

39 Secretariat of the Convention on Biological Diversity (n 8) xv.

40 *Convention on Biological Diversity* art 1.

41 Secretariat of the Convention on Biological Diversity (n 9) 7; Glowka et al and IUCN (n 38) 1.

42 Glowka et al and IUCN (n 38) 1.

43 Secretariat of the Convention on Biological Diversity (n 8) xxiii.

of the Parties (CoP), the Subsidiary Body on Scientific, Technical, and Technological Advice and the Secretariat.

2. Implementation

A complex system of processes and instruments for the implementation of the *Convention on Biological Diversity* has been developed over time.⁴⁴ There is a vast number of different programs of work, guidelines, principles and other Conference of the Parties' decisions governing the *Convention on Biological Diversity*.⁴⁵

States Parties to the *Convention on Biological Diversity* are obliged to adopt national strategies, plans, or programmes in order to implement provisions of the Convention.⁴⁶ They are required to make adjustments in all relevant sectors that touch wildlife trafficking, as far as possible and appropriate, to make sure to be in line with the Convention's goals.⁴⁷ Parties fulfil those obligations by establishing National Biodiversity Strategy and Action Plans (NBSAPs). Such plans serve the successful implementation of the Convention's objectives. They name threats to biological diversity specific to each State Party and necessary steps to counter those threats.⁴⁸ Measures set out in the *Convention on Biological Diversity* are translated into national action through these plans.⁴⁹ For this reason, the plans are of high relevance for the implementation and achievement of the Convention goals.⁵⁰

44 Elisa Morgera and Elsa Tsioumani, 'Yesterday, Today and Tomorrow, Looking Afresh at the Convention on Biological Diversity' (2010) 21(1) *Yearbook of International Environmental Law* 3, 4.

45 Ibid 7.

46 *Convention on Biological Diversity* art 6(a).

47 Ibid art 6(b).

48 Secretariat of the Convention on Biological Diversity, 'What is an NBSAP?' (Web page, undated); see also *Convention on Biological Diversity* art 7(c).

49 *Convention on Biological Diversity* art 6.

50 UNEP, *Law and National Biodiversity Strategies and Action Plans* (2018) 2.

The Conference of the Parties developed the *Strategic Plan for Biodiversity 2011–2020* and the *Aichi Biodiversity Targets*.⁵¹ These instruments are intended as an inspiration for the parties to put biodiversity-related goals into action.⁵² They have, however, been criticised for lacking concrete guidance in developing measures and tools, including legislative instruments, to improve national compliance.⁵³

NBSAPs are supposed to define and prioritize targets from the *Strategic Plan for Biodiversity 2011–2020* and the *Aichi Biodiversity Targets* which are of particular importance to the respective country.⁵⁴ They outline the required action to meet the identified targets.⁵⁵ In addition, NBSAPs should highlight the benefits of biodiversity and ecosystem services regarding human well-being, poverty eradication and national development, as well as the economic, social and cultural values of biodiversity.⁵⁶

It must be emphasised that NBSAPs are not binding legal texts.⁵⁷ Moreover, NBSAPs are not static.⁵⁸ Their implementation is supposed to be evaluated on a regular basis.⁵⁹ Based on the results of such assessments, the information gained must be used to improve NBSAPs.⁶⁰ They are subject to constant and ongoing development.⁶¹

The *Convention on Biological Diversity* further provides for a report mechanism.⁶² National reporting aims at providing information on measures taken to implement the Convention and show what impact

51 UNEP, Conference of the Parties to the Convention on Biological Diversity, *The Strategic Plan for Biodiversity 2011–2020 and the Aichi Biodiversity Targets*, UN Doc UNEP/CBD/COP/DEC/X/2 (29 October 2010).

52 Ibid 6 [1].

53 Morgera and Tsioumani (n 44) 26.

54 UNEP (n 50) 8.

55 Ibid.

56 UNEP, Conference of the Parties to the Convention on Biological Diversity, *Review of the Implementation of Goals 2 and 3 of the Strategic Plan*, UN Doc UNEP/CBD/COP/DEC/IX/8 (9 October 2008) 2 [8(i)].

57 UNEP (n 50) 18.

58 Ibid.

59 Ibid.

60 Ibid.

61 Ibid.

62 *Convention on Biological Diversity* art 26.

those measures have had so far.⁶³ However, national reports⁶⁴ are not individually examined. The Conference of the Parties merely takes a conclusion on the overall results of these reports which are prepared by the *Convention on Biological Diversity's* Secretariat.⁶⁵ Analysis by the *Convention on Biological Diversity's* Secretariat rather focuses on quantity (eg the percentage of parties with biodiversity-related legislation in place) than on quality of the reported measures.⁶⁶ Generally speaking, it can be said that monitoring national implementation only goes as far as to indicate trends and some best practices but is not used to point out weaknesses of certain states or identify those countries in need of assistance.⁶⁷ Inadequate implementation was also one of the reasons leading to the international communities' failure to meet the global target of reducing the loss in biological diversity by 2010.⁶⁸ Reasons thereof range from insufficient efforts of implementation and failing to integrate biodiversity issues into broader policies to the ignorance of underlying causes of biodiversity loss, the insufficient consideration of the real benefits of biological diversity and the failure to integrate the costs of its loss into the planning and managing of every human activity that affects biodiversity in any way.⁶⁹ Nearly all of the latest reports had to conclude that biological diversity is suffering from ongoing decline.⁷⁰

Therefore, the *Convention on Biological Diversity's* institutional framework is, despite its emphasis on domestic implementation, characterized through the lack of mechanisms to monitor implementation and compliance effectively on the national level.⁷¹

63 Ibid; Angus Nurse, *Policing Wildlife: Perspective on the Enforcement of Wildlife Legislation* (2015) 50.

64 See *Convention on Biological Diversity* art 26.

65 Ybin Xiang and Sandra Meehan, 'Financial Cooperation, Rio Conventions and Common Concerns' (2005) 14(3) *Reciel* 212, 218.

66 Morgera and Tsioumani (n 44) 9.

67 Ibid.

68 Ibid 11.

69 Ibid.

70 Secretariat of the Convention on Biological Diversity, *Global Biodiversity Outlook 4, A Mid-term Assessment of Progress towards the Implementation of the Strategic Plan for Biodiversity 2011 – 2020* (2014) 13; Morgera and Tsioumani (n 44) 11.

71 Morgera and Tsioumani (n 44) 8.

3. Relationship to CITES

Article 22 of the *Convention on Biological Diversity* sets out rules for the application of its provisions in relation to other international conventions. Accordingly, where the *Convention on Biological Diversity* conflicts with another convention, the provisions under the *Convention on Biological Diversity* prevail if exercising another Convention's provision would seriously damage or threaten biological diversity.⁷²

There is one international treaty which needs to be looked at more closely in connection with the Convention on Biological Diversity: *CITES* regulates international trade of all species listed in its appendices. It aims at ensuring that trade in wild animals and plants does not threaten the conservation of species.⁷³ *CITES* regulates the trade in over 35 000 animal and plant species by categorizing them into three appendices.⁷⁴ *CITES* only protects species which are either under serious threat of extinction or are likely to become threatened in the future.⁷⁵ Species that are not listed under *CITES* and therefore not protected against trade.⁷⁶

Collaboration with *CITES* mostly takes place with regard to technical matters. The *Convention on Biological Diversity* does not occupy a strong role regarding enforcement. The experience of *CITES* thereof is a valuable source of knowledge for the *Convention on Biological Diversity*.⁷⁷

Wildlife trafficking clearly has negative effects on species conservation which *CITES* is not always able to tackle effectively, mainly based on its one-sided approach to the matter. One of the *Convention on Biological Diversity*'s purposes is to conserve biological diversity as a whole.⁷⁸ Therefore, the *Convention on Biological Diversity* may step in where the *CITES* is too weak or unsuitable to ensure the effective conservation of species. Notably, there is little empirical proof of whether trade regulations actually help in

⁷² *Convention on Biological Diversity* art 22(1); Glowka et al and IUCN (n 38) 109.

⁷³ CITES Secretariat, 'What is CITES?' (Web page, undated).

⁷⁴ CITES Secretariat, 'How CITES Works' (Web page, undated).

⁷⁵ Van Uhm (n 20) 38.

⁷⁶ UNODC (n 1) 13.

⁷⁷ Richard Caddell, 'Inter-Treaty Cooperation, Biodiversity Conservation and the Trade in Endangered Species' (2013) 22(3) *Reciel* 264, 271.

⁷⁸ See *Convention on Biological Diversity* arts 1, 2(1), 7(c), 8, 9.

conserving species sustainably.⁷⁹ Moreover, *CITES* only sets rules for the international *legal* trade. It does not address illegal activities as such.⁸⁰ Scenarios in which products are illegally traded within one country, meaning not leaving the domestic sphere, are outside the scope of *CITES* as well.⁸¹ Apart from putting up trade bans for certain endangered species, *CITES* establishes regulations for the legal trade in species not directly threatened with extinction. This can lead to an increase in the illegal trade as the mere existence of a legal market offers options to infiltrate wildlife illegally.⁸² This interplay has the potential to pose a serious danger to the conservation of biological diversity.⁸³ In the case of such a conflict emerging between provisions of the *CITES* and such of the *Convention on Biological Diversity*, Article 22 of the *Convention on Biological Diversity* needs to be applied which may lead to the non-application of the *CITES* provision in question.⁸⁴

Economic incentives for conservation and sustainable use, the social background of countries obligated to the implementation of anti-wildlife trafficking laws under *CITES* and the *Convention on Biological Diversity* play a very important role in assuring effective and sustainable conservation.⁸⁵ The integration of these spheres functions as a crucial prerequisite to the effective prevention of wildlife trafficking and is encompassed under the *Convention on Biological Diversity*.⁸⁶

IV. Current challenges

For one, the mere existence of wildlife trafficking and the ongoing decline of biological diversity indicates that the *Convention on Biological Diversity* did not live up to its goals. Insufficient implementation on the national level

⁷⁹ Van Uhm (n 20) 38.

⁸⁰ Ibid.

⁸¹ *CITES* art XIV(2); Van Uhm (n 20) 38; Caddell (n 77) 266.

⁸² Khooshie Lal Panjabi (n 33) 15.

⁸³ Ibid.

⁸⁴ *Convention on Biological Diversity* art 22(1).

⁸⁵ Rosie Cooney, 'CITES and the Convention on Biological Diversity: Tensions and Synergies' (2001) 10(3) *Reciel* 259, 266.

⁸⁶ Ibid.

as well as a lack of financial and human resources are key problems. Ultimately, the *Convention on Biological Diversity* remains a framework agreement. This means, whether or not the necessary action takes place on the domestic level is dependent on the respective domestic instruments as well as the political and moral will on the national level. This in turn requires the acceptance that humans owe a duty towards the non-human species of this planet.⁸⁷

Where there are human and non-human or ecological interests involved, history proves that non-human as well as ecological interests are perceived as secondary. As a result, legal instruments commonly treat non-human species as property and prioritise human and especially economic interests over environmental issues.⁸⁸ The issues related to the anthropocentric worldview are endless and represent one of the big challenges also regarding the fight against wildlife trafficking. A State's failure to perform full implementation is therefore often based on economic and political considerations.⁸⁹ In such cases, the principle of state sovereignty may act as a justification for the states's non-compliance.⁹⁰ The enforcement of wildlife laws in particular is inadequate in virtually all jurisdictions.⁹¹ The main reasons for these circumstances are a lack of sufficient human and financial resources – compared to the resources allocated to mainstream law enforcement agencies – and various conflicts of interests.⁹²

Additionally, wildlife trafficking is often treated as a strictly environmental matter. The existing legislation for wildlife-related crimes often ignores the multi-faceted nature of these crimes and treats them as minor offences.⁹³ As a fact, wildlife trafficking often violates various legal fields, such as tax laws, anti-money laundering laws and may also touch upon organized

87 Ted Benton, 'Rights and Justice on a Shared Planet: More Rights or New Relations?' (1998) 2(2) *Theoretical Criminology* 149, 170–171; see also Steven M Wise, *Rattling the Cage: Toward Legal Rights for Animals* (2000) 250.

88 Wise (n 87) 251; see also Mark Stallworthy, *Understanding Environmental Law* (2008) 54; Secretariat of the Convention on Biological Diversity (n 9) 5.

89 Nurse (n 63) 51.

90 Ibid; see also *Convention on Biological Diversity* art 3.

91 Joan E Schaffner, *An Introduction to Animals and the Law* (2011) 69.

92 Ibid.

93 Nellemann et al (eds) (n 11) 87.

crime, violence against other humans, trafficking and even funding of non-state armed groups.⁹⁴

Moreover, wildlife trafficking is often treated reactively, and too little efforts are put into its prevention.⁹⁵ There is proof that law enforcement fails to follow up on wildlife traffickers becoming more and more sophisticated and elaborate in their techniques.⁹⁶

Further problems are inconsistency of legislations, in sentencing and lack of police priority and inconsistency in policing approach.⁹⁷ Especially crime involving non-endangered species is inconsistently dealt with.⁹⁸

1. Ethics and the Convention on Biological Diversity

Never before did society dispose of so much knowledge on the complexity of the social and mental lives of other animals. Today, humans have the ability to understand at least part of the undeniable interdependence between themselves and other life on this planet.⁹⁹ Nonetheless, human civilization lives in constant contradiction regarding the relation with non-human beings.¹⁰⁰

Animals are often only protected when their protection serves a human interest.¹⁰¹ The *Convention on Biological Diversity* makes no exception and does not assign any direct rights to non-human species. Originally it was proposed to define biodiversity as a common heritage of humankind.¹⁰² However, this conception was rejected. Most of the components of biological diversity can be associated with an area of a certain national

⁹⁴ Ibid.

⁹⁵ Nurse (n 63) 127; Freya A V St John, Gareth Edwards-Jones and Julia P G Jones, 'Opinions of the Public, Conservationist and Magistrates on Sentencing Wildlife Trade Crimes in the UK' (2012) 39(2) *Environmental Conservation* 154, 154.

⁹⁶ Nellemann et al (eds) (n 11) 90.

⁹⁷ Nurse (n 63) 113.

⁹⁸ Ibid 171 – 172.

⁹⁹ Benton (n 87) 151.

¹⁰⁰ Ibid; see also Melanie Joy, *Why We Love Dogs, Eat Pigs and Wear Cows: An Introduction to Carnism* (2011) 12; Jonathan Safran Foer, *Eating Animals* (2009) 20.

¹⁰¹ Angus Nurse, 'Beyond the Property Debate, Animal Welfare as a Public Good' (2016) 19(2) *Contemporary Justice Review* 174, 175; Benton (n 87) 151 – 155.

¹⁰² Glowka et al and IUCN (n 38) 3.

jurisdiction.¹⁰³ Therefore, firm emphasis has been placed on sovereign rights over biological resources.¹⁰⁴ As a result, a state may determine rules for areas within its jurisdiction and the resources found in those areas.¹⁰⁵ On the national level wild fauna and flora is often qualified as resources that should be preserved for the public good and for the benefit of future generations.¹⁰⁶ At the same time, it is being recognized that the conservation of biological diversity is of common concern to humankind. This implies a common responsibility to protect biodiversity.¹⁰⁷

The *Convention on Biological Diversity* does address the intrinsic value of biological diversity in its preamble: 'conscious of the intrinsic value of biological diversity [...]'. However, it is no coincidence that such a notion is integrated in the preamble, which does not form part of the legally binding provisions of the *Convention on Biological Diversity*. This reflects that even if there is a certain degree of awareness that non-human species deserve protection for their own sake, society is not ready to actually put this concept into practice. In other words, one can say that the notions governing the *Convention on Biological Diversity* lead to provisions that regulate the use of wild fauna and flora instead of preventing it.¹⁰⁸ Due to the principle of state sovereignty parties to the *Convention on Biological Diversity* may also individually define what sustainable use of 'their' national biodiversity means.¹⁰⁹ That is why the status of wildlife differs from country to country and depends on the cultural background of each state.¹¹⁰

2. Inherent value of non-human species

It is generally accepted that human beings have an inherent value. Specifically, such value includes attributes as the capacity to make choices,

¹⁰³ Ibid.

¹⁰⁴ *Convention on Biological Diversity* preamble, arts 3, 15; Glowka et al and IUCN (n 38) 27.

¹⁰⁵ *Convention on Biological Diversity* art 4; Glowka et al and IUCN (n 38) 27.

¹⁰⁶ Nurse (n 63) 65.

¹⁰⁷ *Convention on Biological Diversity* preamble.

¹⁰⁸ Nurse (n 63) 43.

¹⁰⁹ Ibid 48.

¹¹⁰ Ibid 41.

personal autonomy and the ability to act purposively.¹¹¹ These traits are said to qualify a life to certain rights. Theoretical reason and empirical evidence prove that at least some non-human species can be attributed with concepts as autonomy, preference, benefit, harm, intention etc. Nonetheless, inherent value, which allows human beings to be viewed as right holders, is not granted to non-human species. To treat a matter of similar importance and of an equal demand for protection in a different way constitutes an injustice. In this context this is a form of discrimination also known as ‘speciesism’.¹¹² It is contended that the effective protection of non-human interests requires non-human species to get recognized as inherently valuable and therefore as right holders.¹¹³ At this point it is important to note that promulgation of a right does not serve the cause if the social environment does not allow the right to be exercised.¹¹⁴ This notion underscores the importance of involving ethics in working towards a reconstruction of the personal relationship between humans and nature. Ultimately, such a development may contribute to reducing and hopefully eliminating wildlife trafficking.

V. The way ahead

1. Possibilities

The *Convention on Biological Diversity* provides several instruments which could be helpful in fighting wildlife trafficking. Generally, crime prevention can be exercised on different levels.¹¹⁵ Primary crime prevention serves to directly protect the potential target. This can involve taking measures which make it physically harder for an offender to commit the crime or to put the necessary structure in place which intends to catch the criminals while they attempt to commit the crime. This form of crime prevention

¹¹¹ Benton (n 87) 156.

¹¹² Ibid.

¹¹³ Ibid 157.

¹¹⁴ Ibid 165 – 166.

¹¹⁵ Nurse (n 63) 132.

may also serve a deterrent purpose by displaying the risks involved in committing an offence.¹¹⁶

To achieve effective primary crime prevention with regard to the illegal trade, it is necessary to identify the circumstances under which the crimes are committed¹¹⁷ and then decide what measures need to be put into place. According to Article 7 of the *Convention on Biological Diversity*, each party undertakes steps to identify components of biological diversity which are in need of protection in order to contribute to the overarching goal of preserving biological diversity as a whole.¹¹⁸ The Conference of the Parties advises parties to take a step-by-step approach, starting with the implementation of Article 7(a) and (c) of the *Convention on Biological Diversity*.¹¹⁹

Hence, concerned countries are in a first step held to identify the affected species by illicit trafficking.¹²⁰ Moreover, other activities which have or are likely to have significant adverse effects on the conservation of biological diversity need to be identified and their impact monitored.¹²¹ Accordingly, countries should investigate the methods of poachers, smugglers and other individuals, as well as criminal organizations involved in wildlife trafficking. It should be further analysed what impact such activities have on biodiversity.

In addition, in-situ conservation measures, the exchange of information¹²² as well as technical and scientific cooperation are of great importance.¹²³ In-situ measures are provided for under Article 8 of the *Convention on Biological Diversity*. This provision calls for measures ranging from the establishment of a system of protected areas to the rehabilitation of degraded ecosystems and recovery of threatened species, the protection of natural habitats and the maintenance of viable populations of species in natural

¹¹⁶ Ibid.

¹¹⁷ *Convention on Biological Diversity* art 7(c).

¹¹⁸ Ibid art 7(a).

¹¹⁹ UNEP Conference of the Parties to the Convention on Biological Diversity, *Report of the Third Meeting of the Conference of the Parties to the Convention on Biological Diversity*, UN Doc UNEP/CBD/COP/3/38 (11 February 1997) Annex II, 70 [1], 71 [6].

¹²⁰ *Convention on Biological Diversity* art 7(c).

¹²¹ Ibid.

¹²² Ibid art 17.

¹²³ Ibid art 18.

surroundings. Of particular relevance in this context are measures such as the establishment of protected areas and corresponding guidelines for the selection, establishment and management of such areas (art 8(a), (b)), the promotion of the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings (art 8(d)), the development or maintenance of necessary legislation and/or other regulatory provisions for the protection of threatened species and populations (art 8(k)), the regulation or management of the relevant processes and categories of activities where a significant adverse effect on biodiversity has been determined (arts 8(1), 7(c)), and finally the cooperation in providing financial and other support for measures pursuant to Article 8(a)-(l).¹²⁴

Paragraph (l) concerns the mitigation of threats to biological diversity.¹²⁵ Clearly, wildlife trafficking constitutes such a threat. The Conference of the Parties highlighted the importance of the exchange of information with regard to Article 8.¹²⁶ Moreover, the Conference of the Parties urged the Parties to use reasonable endeavour for regional and international cooperation in the implementation of this article.¹²⁷ Measures under Article 8 are supposed to be part of the NBSAPs.¹²⁸

As biodiversity-related issues, such as wildlife trafficking, are of a global dimension,¹²⁹ it is essential that concerned states inform one another about their individual situations and the action they take to solve their problems.¹³⁰ Each experience of another involved party contains valuable information for others faced with similar problems.¹³¹ As a matter of fact,

¹²⁴ Ibid art 8(m).

¹²⁵ Secretariat of the Convention on Biological Diversity (n 8) 152; see also *Convention on Biological Diversity* art 7(c).

¹²⁶ UNEP Conference of the Parties to the Convention on Biological Diversity, *Report of the Third Meeting of the Conference of the Parties to the Convention on Biological Diversity*, UN Doc UNEP/CBD/COP/2/19 (30 November 1995) Annex II, 54 [3]; Secretariat of the Convention on Biological Diversity (n 8) 120.

¹²⁷ UNEP Conference of the Parties to the Convention on Biological Diversity, *Report of the Third Meeting of the Conference of the Parties to the Convention on Biological Diversity*, UN Doc UNEP/CBD/COP/2/19 (30 November 1995) Annex II, 54 [1], [2].

¹²⁸ Ibid [2]; see also *Convention on Biological Diversity* art 6.

¹²⁹ Glowka et al and IUCN (n 38) 92.

¹³⁰ Ibid.

¹³¹ Ibid.

there is a significant information gap between developed and developing countries in particular.¹³² Therefore, Article 17 of the *Convention on Biological Diversity* requires its parties to exchange relevant information.¹³³

On a different level, preventive measures may involve addressing social conditions which are linked to a certain type of crime.¹³⁴ The *Convention on Biological Diversity* acknowledges that addressing underlying causes which drive biodiversity loss has been wrongfully disregarded in the past.¹³⁵ It is essential that especially NBSAPs consider these factors. This involves the identification and implementation of a system of suited incentives and disincentives under the *Convention on Biological Diversity's* Article 11, to prevent a loss in biological diversity sustainably.¹³⁶ These measures have got to be economically and socially sound.¹³⁷

This provision does not obligate the parties to establish incentive programmes as such.¹³⁸ Rather, the obligation is to adopt measures which act as a motivator for conservation and sustainable use of biological diversity.¹³⁹

With every country having its own background, the system of suitable incentives and disincentives may vary from party to party.¹⁴⁰ Each party needs to work out its own comprehensive system of incentives and disincentives which supports the framework of biodiversity related rules, while it eliminates or minimizes incentives that adversely affect biodiversity at the same time.¹⁴¹

The most promising mixes of incentives and disincentives seem to be those systems considering quite a number of different policies, levels of

¹³² Ibid.

¹³³ *Convention on Biological Diversity* art 17.

¹³⁴ Nurse (n 63) 132.

¹³⁵ Glowka et al and IUCN (n 38) 63.

¹³⁶ UNEP, Conference of the Parties to the Convention on Biological Diversity, *The Strategic Plan for Biodiversity 2011–2020 and the Aichi Biodiversity Targets*, UN Doc UNEP/CBD/COP/DEC/X/2 (29 October 2010) Annex (5).

¹³⁷ *Convention on Biological Diversity* art 11.

¹³⁸ Glowka et al and IUCN (n 38) 63.

¹³⁹ Ibid.

¹⁴⁰ Ibid.

¹⁴¹ Ibid.

government and levels of action (local, national, and international).¹⁴² At the same time, it is important to note that incentives and disincentives mechanisms are not a substitute for conservation laws and other regulatory techniques, but rather means to support and complement those.¹⁴³ The Conference of the Parties has developed recommendations which should help the parties in designing and implementing incentive measures.¹⁴⁴

Various sources also keep mentioning the importance of integrating the economic value of biological diversity into national planning and accounting.¹⁴⁵ This may lead business and state authorities to pay greater attention to the welfare of nature if its value, and especially the costs of its destruction and necessary compensation thereof, is made apparent. Another approach may involve lowering tax rates on sustainable alternative products and by allocating subsidies to sustainably harvested productions in order to make the sector more lucrative.¹⁴⁶ Through such measures local communities may become more inclined in fostering the protection of wildlife populations.¹⁴⁷

Above all, crime prevention needs to be addressed in a social context.¹⁴⁸ This includes for example education programmes, as provided for under Article 13, to further consumer awareness of their impact and put social pressure on offenders. A lack of public awareness of the value of biological diversity and its depletion hinders successful conservation.¹⁴⁹ More understanding

¹⁴² Ibid 64.

¹⁴³ Ibid.

¹⁴⁴ UNEP, Conference of the Parties to the Convention on Biological Diversity, *Report of the Sixth Meeting of the Conference of the Parties to the Convention on Biological Diversity*, UN Doc UNEP/CBD/COP/6/20 (27 May 2002) Annex I 77 – 90, 179 – 189.

¹⁴⁵ See The Economics of Ecosystems and Biodiversity (TEEB), *The Economics of Ecosystems and Biodiversity, Mainstreaming the Economics of Nature: A Synthesis of the Approach, Conclusions and Recommendations of TEEB* (2010) 9.

¹⁴⁶ TRAFFIC, *What's Driving the Wildlife Trade? A Review of Expert Opinion on Economic and Social Drivers of the Wildlife Trade and Trade Control Efforts in Cambodia, Indonesia, Lao PDR and Viet Nam*, Discussion Paper (October 2008) 21.

¹⁴⁷ Nurse (n 63) 132.

¹⁴⁸ Ibid 137.

¹⁴⁹ Glowka et al and IUCN (n 38) 68.

for biodiversity-related topics will lead to more support for conservation measures.¹⁵⁰

Parties are required to promote and encourage the understanding of the importance of biodiversity and its conservation¹⁵¹ by including them in their NBSAPs.¹⁵² Promotion shall take place in cooperation with the relevant institutions, including non-governmental organisations.¹⁵³ The Conference of the Parties urges its parties to allocate the necessary resources to this area.¹⁵⁴ The acceptance of the necessary conservation measures shall be furthered, too.¹⁵⁵

The propagation through media shall be encouraged and biodiversity-related topics shall be immersed into the educational system.¹⁵⁶ One way to approach these matters may include discussions of developing a national biodiversity strategy.¹⁵⁷ This will lead to a biodiversity education action plan.¹⁵⁸ With this course of action, strengths and weaknesses of the existing educational system with regard to biodiversity knowledge can be identified.¹⁵⁹ In addition, this will allow for an overview on cultural, traditional and religious values, knowledge and practices of a specific country, which may prove useful in choosing the suitable educational and awareness-raising options.¹⁶⁰

¹⁵⁰ Ibid.

¹⁵¹ *Convention on Biological Diversity* art 13(a).

¹⁵² UNEP, Conference of the Parties to the Convention on Biological Diversity, *Report of the Fourth Meeting of the Conference of the Parties to the Convention on Biological Diversity*, UN Doc UNEP/CBD/COP/4/27 (15 June 1998) 118 [1]; see also *Convention on Biological Diversity* art 6.

¹⁵³ UNEP, Conference of the Parties to the Convention on Biological Diversity, *Report of the Fourth Meeting of the Conference of the Parties to the Convention on Biological Diversity*, UN Doc UNEP/CBD/COP/4/27 (15 June 1998) 118 [1].

¹⁵⁴ Ibid.

¹⁵⁵ *Convention on Biological Diversity* 13(a).

¹⁵⁶ Ibid; UNEP, Conference of the Parties to the Convention on Biological Diversity, *Report of the Fourth Meeting of the Conference of the Parties to the Convention on Biological Diversity*, UN Doc UNEP/CBD/COP/4/27 (15 June 1998) 119 [3], [4].

¹⁵⁷ *Convention on Biological Diversity* art 6; Glowka et al and IUCN (n 38) 68.

¹⁵⁸ Glowka et al and IUCN (n 38) 68.

¹⁵⁹ Ibid.

¹⁶⁰ Ibid.

To sum up, effective prevention of the illegal trade is best achieved through minimising opportunities for illegal activity in combination with the establishment of a suitable system of incentives and disincentives to support the fight against wildlife trafficking as well as raising public awareness of the impact of consumer and producer behaviour.¹⁶¹

Ultimately, it is important to improve monitoring activity under the *Convention on Biological Diversity*. Especially the report mechanism¹⁶² should involve an examination of the quality of the domestic measures and thus enable the organs of the *Convention on Biological Diversity* to offer support and guidance to those countries where weak compliance has been detected.

2. Ethical approach

Ethics plays an important role in combatting wildlife trafficking and ethical arguments need to be considered in the drafting of international and national wildlife policies and strategies as well as legislation in order to ensure the effectiveness of such instruments. Therefore, ethics should have a prominent place in shaping NBSAPs under the *Convention on Biological Diversity*.

Rights and regulations are important and need to be put in place in order to fight wildlife trafficking. However, rights alone will not change anything if non-human species are mainly perceived as commodities that generate profits and are used in ways that lie in the interest of humans. Many of the problems the fight against wildlife trafficking is confronted with are tied to the anthropocentric worldview, which in turn is linked to ethical considerations of non-human life. To overcome these obstacles, a fundamental change regarding the relation between the human and non-human world is needed.¹⁶³ This requires deep changes in how humans empathise with non-human well-being.¹⁶⁴ Such fundamental change must be accompanied by transforming institutional structures and power

¹⁶¹ *Convention on Biological Diversity* art 13; Nurse (n 63) 139.

¹⁶² See *Convention on Biological Diversity* art 26.

¹⁶³ Secretariat of the Convention on Biological Diversity (n 9) 17; see also Josephine Donovan and Carol J Adams, *Beyond Animal Rights* (1996) 101.

¹⁶⁴ Benton (n 87) 171.

regimes of today's world.¹⁶⁵ Preventing wildlife trafficking is a multi-faceted quest. Above all, it requires the comprehensive acknowledgment of the inherent value of non-human species which ultimately entitles them to certain rights. What should be aimed at is the human recognition of the beauty and dignity of nature.¹⁶⁶ Hereby a many-sided approach for social, economic and ecological transformation in addition to the legal recognition of the inherent value of non-human species is proposed.¹⁶⁷ The author is aware that this is a lot to ask for. However, the threats and consequences of wildlife trafficking are, as we have seen, numerous and severe. Therefore, a call for drastic action is appropriate. The *Convention on Biological Diversity* offers many instruments, that have been discussed above, through which this approach could be realized. NBSAPs should include tactics that support and realize interaction and experience with nature on every possible level, like at schools and universities, on the corporate level, with regard to leisure time activities etc. Topics such as ethics, empathy, kindness, sustainability etc. should have a prominent place in shaping NBSAPs.

VI. Conclusion

The long-term prevention of the illegal trade with natural resources calls for a combination of a great number of actions. Supply and demand reduction need to be addressed likewise.¹⁶⁸ This can include deterrence, legal enforcement, behavioural change and the promotion of alternative livelihoods.¹⁶⁹ The NBSAPs constitute the starting point for each country. They must highlight the importance of the prevention of illegal trade in non-human species and acknowledge that only cross-sectoral measures have the potential to lead to permanent solutions.¹⁷⁰ National and international institutions as well as the environmental, enforcement and development sector and stakeholders involved in security and peace

¹⁶⁵ Ibid.

¹⁶⁶ Ibid.

¹⁶⁷ Ibid.

¹⁶⁸ Nellemann et al (eds) (n 11) 10.

¹⁶⁹ Ibid.

¹⁷⁰ Ibid 11.

keeping missions need to work more closely together for the prevention of wildlife trafficking.¹⁷¹ Moreover, the role of ethics can no longer be underrated. The fight against wildlife trafficking will not pay out in the long run if society is not willing to rethink and rebuild its relationship towards each other and the remaining nature, including wildlife. Further research in these fields will be needed in order to develop strategies towards building societies that sustain themselves peacefully through living with nature and not against nature. With its almost global participation, its goal to conserve biological diversity as a whole as well as its broad range of possible measures aiming at this goal, the *Convention on Biological Diversity* may work as an engine for this project.

Bibliography

- Anderson, Sandra H et al, 'Cascading Effects of Bird Functional Extinction Reduce Pollination and Plant Density' (2011) 331(6020) *Science* 1068
- Barnosky, Anthony D, 'Has the Earth's sixth mass extinction already arrived?' (2011) 471 *Nature* 51
- Barrett, J E et al, 'Decline in a Dominant Invertebrate Species Contributes to Altered Carbon Cycling in a Low-Diversity Soil Ecosystem' (2008) 14(8) *Global Change Biology* 1734
- Beck, Ulrich, 'Living in the world risk society' (2006) 35(3) *Economy and Society* 329
- Beirne, Piers, 'For a Nonspeciesist Criminology: Animal Abuse as an Object of Study' (1999) 37(1) *Criminology* 117
- Benton, Ted, 'Rights and Justice on a Shared Planet: More Rights or New Relations?' (1998) 2(2) *Theoretical Criminology* 149
- Caddell, Richard, 'Inter-Treaty Cooperation, Biodiversity Conservation and the Trade in Endangered Species' (2013) 22(3) *Reciel* 264
- Cardinale, Bradley J et al, 'Biodiversity loss and its impact on humanity' (2012) 486 *Nature* 59

¹⁷¹ Ibid 97.

- Ching-Cha, Kai, 'Can the Convention on Biological Diversity Save the Siberian Tiger?' (2001) 24(2) *Environmental Law and Policy Journal* 3
- CITES Secretariat, 'How CITES Works' (Web page, undated) <<https://www.cites.org/eng/disc/how.php>>
- CITES Secretariat, 'What is CITES?' (Web page, undated) <<https://www.cites.org/eng/disc/what.php>>
- Cooney, Rosie, 'CITES and the Convention on Biological Diversity: Tensions and Synergies' (2001) 10(3) *Reciel* 259
- Donovan, Josephine and Carol J Adams, *Beyond Animal Rights*, London and New York, NY: Continuum, 1996
- Foer, Jonathan Safran, *Eating Animals*, New York: Little, Brown and Company, 2009
- Glowka, Lyle et al and IUCN, *A Guide to the Convention on Biological Diversity*, Gland, IUCN, 2nd ed, 1994
- Hooper, David et al, 'A global synthesis reveals biodiversity loss as a major driver for ecosystem change' (2012) 486 *Nature* 105
- Joy, Melanie, *Why We Love Dogs, Eat Pigs and Wear Cows: An Introduction to Carnism*, San Francisco, CA: Conari Press, 2011
- Kellert, Stephen R and Edward O Wilson, *The Biophilia Hypothesis*, Washington, DC: Island Press, 1993
- Khooshie Lal Panjabi, Rane, 'For Trinkets, Tonics and Terrorism, International Wildlife Poaching in the Twenty-First Century' (2014) 43(1) *Georgia Journal of International and Comparative Law* 1
- Morgera, Elisa and Elsa Tsioumani, 'Yesterday, Today and Tomorrow, Looking Afresh at the Convention on Biological Diversity' (2010) 21(1) *Yearbook of International Environmental Law* 3
- Nellemann, C et al (eds), *The Environmental Crime Crisis, Threats to Sustainable Development from Illegal Exploitation and Trade in Wildlife and Forest Resources*, A UNEP Rapid Response Assessment, Nairobi and Arendal: UNEP and GRID-Ardenal 2014
- Nurse, Angus, *Policing Wildlife: Perspective on the Enforcement of Wildlife Legislation*, Basingstoke: Palgrave Macmillan, 2015
- Nurse, Angus, 'Beyond the Property Debate, Animal Welfare as a Public Good' (2016) 19(2) *Contemporary Justice Review* 174

- Schaffner, Joan E, *An Introduction to Animals and the Law*, London: Palgrave Macmillan, 2011
- Switzerland, Bundesamt für Umwelt BAFU, *Biodiversität in der Schweiz ist unter Druck* (Web page, 19 July 2017) <<https://www.bafu.admin.ch/bafu/de/home/dokumentation/medienmitteilungen/anzeige-nsb-unter-medienmitteilungen.msg-id-67565.html>>
- Secretariat of the Convention on Biological Diversity, *Handbook of the Convention on Biological Diversity Including its Cartagena Protocol on Biosafety*, Montreal: Secretariat of the Convention on Biological Diversity, 3rd ed, 2005
- Secretariat of the Convention on Biological Diversity, *Sustaining Life on Earth, How the Convention on Biological Diversity Promotes Nature and Human Well-being*, Montreal: Secretariat of the Convention on Biological Diversity, April 2000
- Secretariat of the Convention on Biological Diversity, *Global Biodiversity Outlook 4, A Mid-term Assessment of Progress towards the Implementation of the Strategic Plan for Biodiversity 2011 – 2020*, Montreal: Secretariat of the Convention on Biological Diversity, 2014
- Secretariat of the Convention on Biological Diversity, 'What is an NBSAP?' (Web page, undated) <<https://www.cbd.int/nbsap/introduction.shtml>>
- Slade, Elenor M, Darren J Mann and Owen T Lewis, 'Biodiversity and Ecosystem Function of Tropical Forest Dung Beetles Under Contrasting Logging Regimes' (2011) 144(1) *Biological Conservation* 166
- St John, Freya A V, Gareth Edwards-Jones and Julia P G Jones, 'Opinions of the Public, Conservationist and Magistrates on Sentencing Wildlife Trade Crimes in the UK' (2012) 39(2) *Environmental Conservation* 154
- Stallworthy, Mark, *Understanding Environmental Law*, London: Sweet & Maxwell, 2008
- The Economics of Ecosystems and Biodiversity (TEEB), *The Economics of Ecosystems and Biodiversity, Mainstreaming the Economics of Nature: A Synthesis of the Approach, Conclusions and Recommendations of TEEB*, Nairobi et al: UNEP et al, 2010
- TRAFFIC, *What's Driving the Wildlife Trade? A Review of Expert Opinion on Economic and Social Drivers of the Wildlife Trade and Trade Control Efforts in Cambodia, Indonesia, Lao PDR and Viet Nam*, Discussion Paper, Washington, DC: The International Bank for Reconstruction and Development/The World Bank, October 2008

- Tudge, Colin, *The Tree: A Natural History of What Trees Are, How They Live, and Why They Matter*, New York, NY: Three Rivers Press, 2005
- UNEP, Conference of the Parties to the Convention on Biological Diversity, *The Strategic Plan for Biodiversity 2011 – 2020 and the Aichi Biodiversity Targets*, UN Doc UNEP/CBD/COP/DEC/X/2 (29 October 2010)
- UNEP, Conference of the Parties to the Convention on Biological Diversity, *Review of the Implementation of Goals 2 and 3 of the Strategic Plan*, UN Doc UNEP/CBD/COP/DEC/IX/8 (9 October 2008)
- UNEP Conference of the Parties to the Convention on Biological Diversity, *Report of the Third Meeting of the Conference of the Parties to the Convention on Biological Diversity*, UN Doc UNEP/CBD/COP/3/38 (11 February 1997)
- UNEP, Conference of the Parties to the Convention on Biological Diversity, *Report of the Third Meeting of the Conference of the Parties to the Convention on Biological Diversity*, UN Doc UNEP/CBD/COP/4/27 (15 June 1998)
- UNEP Conference of the Parties to the Convention on Biological Diversity, *Report of the Third Meeting of the Conference of the Parties to the Convention on Biological Diversity*, UN Doc UNEP/CBD/COP/2/19 (30 November 1995)
- UNEP, *Law and National Biodiversity Strategies and Action Plans*, Nairobi: 2018
- UNODC, *World Wildlife Crime Report, Trafficking in Protected Species*, New York, NY: United Nations 2016
- Van Uhm, Daan P, *The Illegal Wildlife Trade, Inside the World of Poacher, Smugglers and Traders*, [s.l.]: Springer, 2016
- Whiles, M R, 'Disease-Driven Amphibian Declines Alter Ecosystem Process in a Tropical Stream' (2013) 16(1) *Ecosystems* 146
- Wise, Steven M, *Rattling the Cage: Toward Legal Rights for Animals*, Cambridge, MA: Perseus, 2000
- Wright, Justin P, Clive G Jones and Alexander S. Flecker, 'An Ecosystem Engineer, the Beaver, Increases Species Richness at the Landscape Scale' (2002) 132(1) *Oecologia* 96
- Xiang, Ybin and Sandra Meehan, 'Financial Cooperation, Rio Conventions and Common Concerns' (2005) 14(3) *Reciel* 212

Chapter Eight

‘Conservation Through Habitat Protection’: Die UNESCO Welterbekonvention im Kampf gegen den illegalen internationalen Handel von gefährdeten Tier- und Pflanzenarten

THERESIA ANGERER

Naturerbestätten unter dem Schutz der *Welterbekonvention* sind oftmals die letzte Bastion für seltene, gefährdete Pflanzen- und Tierarten, die auf intensiven internationalen Schutz angewiesen sind. Ihre Präsenz zieht verstärkt transnational organisierte Gruppen an, welche illegale Aktivitäten, wie etwa Wilderei oder Holzeinschlag, betreiben. Die daraus gewonnenen Produkte gelangen in das Netz des strukturierten Schmuggels. Dieses Kapitel zeigt die Relevanz von Naturerbestätten unter dem Schutzsystem der *Welterbekonvention* für den Erhalt gefährdeter Tier- und Pflanzenspezies auf und untersucht, welche Rolle dieses Übereinkommen im Kampf gegen den illegalen internationalen Handel in Fauna und Flora einnehmen kann.

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I. Einleitung

Die *Welterbekonvention*¹ ist als erstes Übereinkommen, welches einen holistischen Zugang zu Natur und Kultur wählte,² von der Idee geprägt, dass Orte von außergewöhnlichem universellen Wert als ein Teil des Erbes der Menschheit geschützt werden müssen.³ Die von der UNESCO geführte Welterbeliste umfasst heute 1 121 Welterbestätten, davon 213 Naturerbestätten, 869 Kulturerbestätten und 39 Welterbestätten gemischter Natur.⁴

Die Weltnaturschutzunion (IUCN, International Union for Conservation of Nature) vertritt die Meinung, es handle sich bei den bereits registrierten Naturerbestätten und den Stätten von gemischter Natur um etwa 60 % des

1 *Convention for the Protection of the World Cultural and Natural Heritage*, eröffnet zur Unterzeichnung 16. November 1972, 1037 UNTS 151 (in Kraft getreten 17. Dezember 1975).

2 Francesco Francioni (Hrsg.), *The 1972 World Heritage Convention: A Commentary* (2008) 16 – 17.

3 Kerstin Odendahl, 'World Natural Heritage', in *Max Planck Encyclopaedias of Public International Law* (August 2015) [30].

4 UNESCO World Heritage Centre, 'World Heritage List' (Webseite, 2019).

tatsächlichen Naturerbes.⁵ Aus diesem Grund soll der Schwerpunkt in Zukunft nicht auf Identifikation, sondern auf richtiger Erhaltung und nachhaltigem Management liegen. Die *Welterbekonvention* muss sich also mit der Frage konfrontieren, welchen Teil sie zum Erhalt der schützenswerten Gebiete beitragen kann.⁶

Naturerbestätten unter dem Schutz der *Welterbekonvention* (*Übereinkommen zum Schutz des Kultur- und Naturerbes der Menschheit*) sind oftmals die letzte Bastion für seltene, gefährdete Pflanzen- und Tierarten, die auf intensiven internationalen Schutz angewiesen sind. Ihre Präsenz zieht verstärkt transnational organisierte Gruppen an, die illegale Aktivitäten, wie etwa Wilderei oder Holzeinschlag, betreiben. Die daraus gewonnenen Produkte gelangen in das Netz des industriell strukturierten Schmuggels. Diese illegalen Eingriffe führen zu einer systematischen Abwertung des außergewöhnlichen universellen Werts der Naturerbestätten und resultieren im Ernstfall, bei vollkommener Zerstörung des Naturerbes, in der Löschung von der Welterbeliste und somit im Entfall des internationalen Schutzes.⁷

II. Hintergrund

Der Schutz des Naturerbes war bis 1972 klar der Sphäre des Völkerrechts zugeteilt. Aus diesem Grund existierten nur sehr limitiert Verbindlichkeiten und Pflichten auf nationaler Ebene. Als Reaktion auf den steigenden Wasserspiegel des Assuan-Staudammes im südlichen Ägypten Anfang der 1960er Jahre, welcher die Tempel von Abu Simbel zunehmend beschädigte, sowie im Zusammenhang mit den starken Überflutungen von Florenz und Venedig 1966 war die internationale Gemeinschaft entschlossen, künftige Zerstörung von Kulturerbe durch koordinierte, globale Zusammenarbeit zu verhindern.⁸ UNESCO, die Organisation der Vereinten Nationen für Erziehung, Wissenschaft und Kultur, eine rechtlich selbständige Sonderorganisation der Vereinten Nationen, skizzierte 1971 im Hinblick auf die 1972 stattfindende Kon-

5 Michael Bowman et al, *Lyster's International Wildlife Law* (2010) 481.

6 Julia Marton-Lefèvre et al, 'World Heritage and our protected planet' (2014) 73 *World Heritage* 8, 17.

7 Dalberg, Not for Sale: Halting the illegal trade of CITES species from World Heritage Sites (2017) 10 – 11.

8 Odendahl (n 3) [2].

ferenz der Vereinten Nationen über die Umwelt des Menschen in Stockholm einen Vertragsentwurf zum Schutz von Monumenten, Gebäudegruppen und Stätten von universellem Wert.⁹

Zur selben Zeit bereitete die IUCN einen Vertragsentwurf zur Erhaltung des Naturerbes vor. Dieser Entwurf wurde nach der internationalen Präsentation im Zuge der Weltumweltkonferenz mit dem Vertragsentwurf der UNESCO zur Erhaltung des Kulturerbes kombiniert.¹⁰ Der vereinigte Vertrag, das *Übereinkommen zum Schutz des Kultur- und Naturerbes der Welt*, kurz *Welterbekonvention* oder WHC, wurde 1972 von der UNESCO Generalkonferenz verabschiedet und trat 1975 nach der erforderlichen Ratifikation durch 20 Vertragsparteien in Kraft. Am 31. Jänner 2017 hatten 193 Staaten die *Welterbekonvention* ratifiziert.¹¹

Trotz teils durchaus innovativer Ansätze der *Welterbekonvention* ist dieses Übereinkommen ein Kind seiner Zeit geblieben. Sprache und Wesen der Konvention sind sehr allgemein gehalten.¹² Respekt vor nationaler Souveränität und privaten Eigentumsrechten war in den 1970er Jahren in der Sphäre des Völkerrechts weitgehend unumstritten. Dies findet etwa in dem Grundsatz Ausdruck, dass sowohl die Aufnahme in die Liste als auch das Gewähren von internationaler Unterstützung eines Antrags und der ausdrücklichen Zustimmung des betroffenen Mitgliedsstaates bedarf. Anders etwa in Artikel 3 des *Übereinkommens über die biologische Vielfalt (Biodiversitätskonvention)* von 1993.¹³ Dort wird festgehalten, dass es sich bei der Erhaltung natürlicher Ressourcen um ein gemeinsames Anliegen der Menschheit handelt.¹⁴

Weiters ist keine Anwendung außerhalb nationaler Jurisdiktion möglich und es besteht keine Möglichkeit, die *Welterbekonvention* direkt durchzusetzen.

9 UN, Audiovisual Library of International Law, 'Convention concerning the Protection of the World Cultural and Natural Heritage, Paris 16. November 1972' (Webseite, 2019); Bowman et al (n 5) 452.

10 Odendahl (n 3) [2].

11 UN Treaty Collection, 'Convention for the protection of the world cultural and natural heritage' (Webseite, 2019).

12 Edith Brown Weiss, 'International Environmental Law: Contemporary Issues and the Emergence of a New World Order' (1993) 81 *Georgetown Law Journal* 675, 686.

13 *Convention on Biological Diversity*, eröffnet zur Unterzeichnung 5. Juni 1992, 1760 UNTS 79 (in Kraft getreten 29. Dezember 1993).

14 Bowman et al (n 5) 458.

Die einzige Sanktion für Verstöße gegen die bindenden Regelungen ist die Löschung von der Welterbeliste.¹⁵

III. Inhalt und Aufbau der Welterbekonvention

1. Die Welterbekonvention

Die *Welterbekonvention* legt in ihrem Vertragstext die Rahmenbedingungen für ein effektive Strategie zur Erhaltung des Welterbes fest. Sie definiert das Welterbe in den Artikeln 1 und 2, widmet sich in den Artikeln 4 bis 7 der Etablierung eines zweistufigen Schutzsystems auf globaler und nationaler Ebene und beschreibt in den Artikeln 8 bis 18 die Einrichtung und Funktionsweise der beiden wichtigsten Organe. Die Tätigkeiten dieser Organe – namentlich des Welterbekomitees und des Fonds für den Schutz des Kultur- und Naturerbes der Welt – sind verknüpft mit dem Prozess, durch welchen Staaten ihr potenzielles Welterbe identifizieren und nominieren können. Für den Fall nicht ausreichender Mittel auf nationaler Ebene finden sich in den Artikeln 19 bis 26 relevante Informationen für ein Ansuchen um internationale Unterstützung. Eine wichtige Methode, um Bewusstsein zu bilden und die Öffentlichkeit auf die Bedeutung des Welterbes hinzuweisen, sind Bildungsprogramme, deren Förderung in den Artikeln 27 und 28 explizit erwähnt ist. Artikel 29 behandelt die Berichtspflicht der Staaten, welche die Generalversammlung der UNESCO über Entwicklungen auf ihrem Hoheitsgebiet zu unterrichten haben. Die Artikel des letzten Teils der Konvention beschäftigen sich mit formalen Fragen, wie etwa der Festlegung authentischer Vertragsversionen, Regelungen im Zusammenhang mit Ratifikation und Inkrafttreten der Bestimmungen sowie potenziellen Vertragsauflösungsoptionen.

¹⁵ Odendahl (n 3) [33].

2. Die Welterbeliste

Der Ansatz der *Welterbekonvention* zum Schutz gefährdeter Spezies ist der Schutz des Habitats, um somit das Überleben der Tiere zu sichern.¹⁶ Diese Habitate werden neben anderen Natur- und Kulturstätten von außergewöhnlichem universellen Wert auf die Welterbeliste des Übereinkommens aufgenommen. Welterbestätten gemischter Natur sind solche, welche die Begriffsbestimmungen des Kultur- und des Naturerbes nach Artikel 1 und 2 des Übereinkommens teilweise oder ganz erfüllen.¹⁷

Mit der Aufnahme auf die Welterbeliste unterliegen die Habitate gefährdeter Tier- und Pflanzenarten offiziell dem Schutzsystem der *Welterbekonvention*. Die Vertragsstaaten sind angehalten, Welterbestätten effektiv zu schützen und für die kommenden Generationen zu erhalten. Auch Handlungen, welche direkt oder indirekt das Welterbe anderer Staaten gefährden können, sind gemäß Artikel 6(3) zu unterlassen.

3. Die Rote Liste

Neben der Welterbeliste gibt es die 'Rote Liste' des gefährdeten Welterbes.¹⁸ Wenn eine Welterbestätte mit schwerwiegenden Gefahren konfrontiert ist oder größere Eingriffe notwendig sind und in beiden Fällen der betroffene Staat um internationale Unterstützung gebeten hat, so kann das Komitee jederzeit mit einer Mehrheit von zwei Dritteln beschließen, die Stätte auf die Rote Liste zu setzen.¹⁹ Dies geschah beispielsweise mit dem Keoladeo Nationalpark in Indien in den 1980er und 90er-Jahren als Reaktion auf den starken Rückgang der Nonnenkraniche.²⁰

Von den 213 Naturerbestätten befinden sich 17 auf der Roten Liste, zum Beispiel das Wildreservat Selous in Tansania, die tropischen Regenwälder von

16 Wm Carroll Muffet, 'International Protection of Wildlife', in Fred L Morrison und Rudiger Wolfram (Hrsg.), *International, regional and national environmental law* (2000) 343, 353.

17 UNESCO, Zwischenstaatliches Komitee für den Schutz des Kultur- und Welterbes der Welt, *Richtlinien für die Durchführung des Übereinkommens zum Schutz des Kultur- und Naturerbes der Welt*, World Heritage Committee Doc WHC.15/01 (8. Juli 2015) [46].

18 Odendahl (n 3) [13].

19 UNESCO, Zwischenstaatliches Komitee für den Schutz des Kultur- und Welterbes der Welt (n 17) [177].

20 Alexander Gillespie, *Conservation, Biodiversity and International Law* (2011) 184.

Sumatra in Indonesien oder die Nationalparks Garamba, Virunga, Salonga und Kahuzi-Biega in der Demokratischen Republik Kongo.²¹ Elf der 17 gefährdeten Naturgüter befinden sich auf dem afrikanischen Kontinent.

4. Organe

Die wichtigsten Akteure der *Welterbekonvention* sind die Vertragsstaaten, welche sich um die nationale Umsetzung und Durchsetzung kümmern.

Die Generalversammlung der Vertragsstaaten befasst sich gemäß Artikel 8 mit der Wahl der Mitglieder des Welterbekomitees und legt den Prozentsatz der Mitgliedsbeiträge für den Welterbefonds fest.²²

Das Welterbekomitee besteht aus 21 Mitgliedern. Ihm obliegt gemäß Artikel 21 die Identifikation des Welterbes, die Überprüfung des Erhaltungszustandes der einzelnen Stätten, die Verwaltung der Welterbeliste und die Unterstützung der Vertragsparteien bei der nationalen Umsetzung.

Weiters ist ein Sekretariat, auch Welterbezentrum genannt, eingerichtet, welches gemäß Artikel 14 mit administrativen Aufgaben betraut ist. Außerdem kümmert sich das Sekretariat um die Zusammenarbeit mit den Beratungsorganen.

Die Beratungsorgane sind die Internationale Studienzentrale für die Erhaltung und Restaurierung von Kulturgut (ICCROM, International Centre for the Study of Preservation and Restoration of Cultural Property), sowie der Internationale Rat für Denkmalpflege (ICOMOS, International Council on Monuments and Sites) und die Weltnaturschutzunion im Bereich des Naturerbes. Die Beratungsorgane unterstützen die Vertragsparteien einerseits bei der Umsetzung der *Welterbekonvention* (Artikel 13) und übernehmen andererseits einzelne Kontrollfunktionen (Artikel 14).

²¹ UNESCO, World Heritage Centre (n 4).

²² UNESCO, Zwischenstaatliches Komitee für den Schutz des Kultur- und Welterbes der Welt (n 17) [18].

5. Fonds für den Schutz des Kultur- und Naturerbes der Welt

Der 'Motor' für Effektivität und Funktionalität der *Welterbekonvention* ist der Fonds für den Schutz des Kultur- und Naturerbes der Welt. Aus Artikel 13 ergibt sich das Recht der Vertragsparteien, um finanzielle Unterstützung anzusuchen. Dies wird oftmals als ein Hauptgrund für die starke internationale Beteiligung an der *Welterbekonvention* gehandelt. Das Komitee definiert hierfür drei Kategorien der Unterstützung: Dringlichkeitsunterstützung, vorbereitende Unterstützung und Unterstützung für Erhaltung und Verwaltung.²³

Die Vertragsstaaten müssen gemäß Artikel 15 einen einheitlichen Prozentsatz ihrer allgemeinen Zahlungen an die UNESCO in den Fonds leisten. Das jährliche Budget der UNESCO beläuft sich auf ungefähr 1,3 Milliarden US Dollar. Davon stammen etwa 39 % aus den Pflichtbeiträgen der Vertragsstaaten; der Rest wird durch Unterstützungsgelder, externe Beiträge und freiwillige Spenden aufgebracht.²⁴

Der Fonds für den Schutz des Kultur- und Naturerbes der Welt kann jährlich etwa 4 Millionen US Dollar zur Verfügung stellen.²⁵ Neben den verpflichtenden Leistungen setzt sich der Fonds ebenfalls aus freiwilligen Beiträgen der Vertragsparteien sowie aus finanzieller Unterstützung von externen Akteuren zusammen. Bereits mehrere Initiativen zugunsten des Weltnaturerbes – etwa Rapid Response Facility (RRF) oder Great Apes Survival Partnership (GRASP) aus dem Jahr 2001 – wurden großteils aus öffentlichen und privaten Spenden finanziert.²⁶ RRF gewährt Einzelförderungen, entscheidet über die Vergabe innerhalb eines Zeitraumes von etwa acht Tagen und ermöglicht somit eine akute Reaktion in Notfällen.²⁷ GRASP befasst sich mit dem Schutz der Menschenaffen und dem Erhalt ihrer natürlichen Lebensräume.²⁸

²³ Ibid [235].

²⁴ UNESCO, 40 C/5, *Volume 1: Draft Resolutions, Second biennium 2020 – 2021* (2019) 1 – 2.

²⁵ UNESCO, World Heritage Centre, 'Funding' (Webseite, 2019).

²⁶ Bowman et al (n 5) 114.

²⁷ UNESCO, 'Rapid Response Facility' (Webseite, 2019).

²⁸ UN-GRASP (Great Apes Survival Partnership), 'About GRASP' (Webseite, 2019).

6. Rechte und Pflichten der Vertragsstaaten

Gemäß Artikel 4 der *Welterbekonvention* erkennen alle Vertragsstaaten abstrakt ihre Aufgabe an, die Identifikation, den Schutz, die Erhaltung, die Präsentation und die Weitergabe von Kultur- und Naturerbe auf ihrem Territorium an die nächsten Generationen zu sichern. Zu diesem Zweck hat die *Welterbekonvention* die Welterbeliste und die Rote Liste des gefährdeten Welterbes eingeführt. Es ist allerdings irrelevant für die Schutzverpflichtung der Staaten, ob das Erbe bereits auf der Liste zu finden ist; auch noch nicht durch das Abkommen erfasste Stätten fallen in die Verantwortung der Mitgliedsstaaten. Die Liste selbst dient der Identifikation und Abgrenzung der einzelnen Stätten und dies obliegt gemäß Artikel 3 den Vertragsstaaten, auf deren Territorium sie sich befinden. Sollte der Implementationsprozess Probleme bereiten oder ist der Vertragsstaat nicht in der Lage, ihn selbst zu bewältigen, erwächst aus Artikel 4 das Recht, um internationale Unterstützung anzufragen. Dies gilt auch für Schwierigkeiten bezüglich der Erhaltung.

Besonders relevant im Zusammenhang mit den Schutzverpflichtungen ist Artikel 6(3). Hier heißt es, dass die Vertragsstaaten sich verpflichten, Handlungen zu unterlassen, die direkt oder indirekt das Welterbe anderer Staaten gefährden können. Beispielhaft hierfür ist die Bitte um Kooperation, welche das Welterbekomitee 2005 an den Sudan richtete, um die grenzüberschreitende Wilderei betreffend die Demokratische Republik Kongo bestmöglich zu unterbinden.²⁹ Hieraus ergibt sich somit eine konkrete Verpflichtung, während Artikel 4 lediglich das Anerkenntnis fordert, dass es 'in erster Linie' die Aufgabe der einzelnen Vertragspartei ist, die Identifikation, den Schutz, die Erhaltung, die Präsentation und die Weitergabe von Kultur- und Naturerbe auf ihrem Territorium an die nächsten Generationen zu sichern. Hierfür muss gemäß Artikel 4 alles in den Kräften des Vertragsstaates Stehendes getan werden 'unter vollem Einsatz seiner eigenen Hilfsmittel und gegebenenfalls unter Nutzung jeder ihm erreichbaren internationalen Unterstützung und Zusammenarbeit, insbesondere auf finanziellem, künstlerischem, wissenschaftlichem und technischem Gebiet.'

In Artikel 5 finden sich erläuternde Beispiele, welche Maßnahmen etwa getroffen werden sollen, um den Anforderungen von Artikel 4 zu genügen.

²⁹ UNESCO World Heritage Committee, *World Heritage Properties of the Democratic Republic of the Congo (RDC)*, WHC Decision: 29 COM 7 A.4 (2005) [11].

Hierbei wird der Bogen von einer unterstützenden allgemeinen Politik, über die Einrichtung von Dienststellen für den Schutz und die Erhaltung des Kultur- und Naturerbes hin zu geeigneten rechtlichen, wissenschaftlichen, technischen sowie Verwaltungs- und Finanzmaßnahmen gespannt. Die Vertragsstaaten sind aber nicht erfolgsverpflichtet; es reicht gemäß Artikel 5 aus, dass 'sich jeder Vertragsstaat bemühen [wird], nach Möglichkeit und im Rahmen der Gegebenheiten seines Landes zu handeln'.

Konkrete Verpflichtungen ohne Abwägungsmöglichkeiten ergeben sich für die Vertragsstaaten somit nur in Bezug auf die Naturerbestätten anderer Vertragsstaaten.

Die *Welterbekonvention* entstammt weiters einer Zeit, in welcher, noch mehr als heute, die absolute staatliche Souveränität als gegeben angesehen wurde. Ein Vorstoß in Richtung internationaler Kooperation zur effektiven Erhaltung des Welterbes findet sich allerdings in Artikel 6(1):

Unter voller Achtung der Souveränität der Staaten, in deren Hoheitsgebiet sich das in den Artikeln 1 und 2 bezeichnete Kultur- und Naturerbe befindet, und unbeschadet der durch das innerstaatliche Recht gewährten Eigentumsrechte erkennen die Vertragsstaaten an, daß dieses Erbe ein Welterbe darstellt, zu dessen Schutz die internationale Staatengemeinschaft als Gesamtheit zusammenarbeiten muss.

Gibt es somit zwar keine Mechanismen, die eine Intervention von außen legitimieren, so findet sich doch in Artikel 6(1) ein starker Appell zur verstärkten internationalen Kooperation und der Hinweis darauf, dass die einzelnen Kultur- und Naturerbestätten einen Teil des universellen Erbes der Menschheit darstellen.³⁰

Schließlich sollen auch moralische Argumente die Befolgungsbereitschaft erhöhen. Dies ist ein verständliches Instrument, schließlich fußt die Effektivität der *Welterbekonvention* doch zu einem Teil auf dem Stolz der Staaten auf die Welterbestätten innerhalb ihres Hoheitsgebietes.

³⁰ Hennie Strydom, 'Transnational Organised Crime and the Illegal Trade in Endangered Species of Wild Fauna and Flora' in Pierre Hauck and Sven Peterke (Hrsg.), *International Law and Transnational Organised Crime* (2016) 264, 279.

IV. Aufnahme in die Welterbeliste

1. Aufnahmekriterien

Plant ein Vertragsstaat, ein Naturgut zur Aufnahme in die Welterbeliste vorzuschlagen, so müssen drei Punkte beachtet werden: (1) der potenzielle außergewöhnliche universelle Wert, (2) die Integrität der Naturstätte und (3) ein intaktes Managementsystem im Vertragsstaat. Der Schutz im Bereich des Naturerbes erstreckt sich gemäß Artikel 2 lediglich auf unbewegliche Elemente der Natur und Habitate.

1.1. Außergewöhnlicher universeller Wert

Der Dreh- und Angelpunkt für die Aufnahme einer Naturstätte in die Welterbeliste ist der außergewöhnliche universelle Wert. Absatz 49 der *Richtlinien für die Durchführung des Übereinkommens zum Schutz des Kultur- und Naturerbes der Welt* definiert diesen als Wert, der eine kulturelle und/oder natürliche Bedeutung bezeichnet, die so außergewöhnlich ist, dass sie die nationalen Grenzen durchdringt und sowohl für gegenwärtige als auch für künftige Generationen der gesamten Menschheit von Bedeutung ist. Weiters stellt Absatz 77 der Richtlinien zur Bestimmung dieses Werts einen Kriterienkatalog zur Verfügung. Dieser umfasst zehn Punkte, wobei lediglich Punkte (vii) bis (x) für das Naturerbe einschlägig sind. Von diesen vier Punkten sind insbesondere Kriterien (ix) und (x) relevant im Kontext mit Tieren und Pflanzen zusammenhängender Kriminalität:

Güter sollten daher [...]

- (ix) außergewöhnliche Beispiele bedeutender im Gang befindlicher ökologischer und biologischer Prozesse in der Evolution und Entwicklung von Land-, Süßwasser-, Küsten- und Meeres-Ökosystemen sowie Pflanzen- und Tiergemeinschaften darstellen;
- (x) die für die In-situ-Erhaltung der biologischen Vielfalt bedeutendsten und typischsten natürlichen Lebensräume enthalten, einschließlich solcher, die bedrohte Arten enthalten, welche aus wissenschaftlichen Gründen oder ihrer Erhaltung wegen von außergewöhnlichem universellem Wert sind.³¹

³¹ UNESCO, Zwischenstaatliches Komitee für den Schutz des Kultur- und Welterbes der Welt (n 17) [77].

Letzteres Kriterium ist anzuwenden, wenn sich auf einem Gebiet die wichtigsten natürlichen Habitate der am stärksten gefährdeten Tierarten befinden. Etwa 60 Prozent der Naturerbestätten wurden unter anderem auf Basis von Kriterium (x) ausgewählt. Dies bedeutet, dass Gebiete, welche wichtige und gefährdete Arten beherbergen, spezifisch aus ebendiesem Grund zu Weltnaturerbe ernannt werden. Der Konnex zwischen gefährdeten Tier- sowie Pflanzenspezies und Weltnaturerbe ist somit hergestellt.

1.2. Integrität

Die Voraussetzungen für die geforderte Integrität der Naturstätten unterscheiden sich für die einzelnen Kriterien. Absatz 96 der Richtlinien definiert die Voraussetzungen für Kriterium (x) wie folgt:

Nach Kriterium x angemeldete Güter sollten die wichtigsten Güter für die Erhaltung der biologischen Vielfalt sein. Nur die Güter, die die größte biologische Vielfalt aufweisen und/oder diese am besten verkörpern, erfüllen voraussichtlich dieses Kriterium. Die Güter sollten Lebensräume zur Bewahrung der verschiedenartigsten, für die biogeographische Region und die betreffenden Ökosysteme typischen Tier- und Pflanzenwelt enthalten.³²

Für die Ernennung zur Naturerbestätte sind also jene Gebiete qualifiziert, welche ein Abbild großer Biodiversität sind oder den Prototyp eines gewissen Ökosystems darstellen. Gemäß Absatz 95 soll etwa ein Gebiet, welches eine große Vielfalt an Tier- und Pflanzenarten beherbergt, groß genug sein, um ausreichend Habitat zur Sicherung des Überlebens zur Verfügung zu stellen.³³

1.3. Managementsystem

Gemäß Absatz 109 der Richtlinien besteht der Zweck des Managements darin, die Welterbestätten effektiv zu schützen und für die kommenden Generationen zu erhalten. Beispiele für einen Schutz dieser Art sind klar definierte Gebietsabgrenzungen, die Einrichtung von Pufferzonen sowie reaktives und periodisches Monitoring.³⁴

³² Ibid [96].

³³ Bowman et al (n 5) 465.

³⁴ IUCN *A Review of the Impact of IUCN Resolutions on International Conservation Efforts* (1981) [109].

2. Aufnahmeverfahren

Formal gesehen bedarf es zur Aufnahme auf die Welterbeliste gemäß Artikel 11(2) der Einreichung einer Bestandsaufnahme von potenziellen Welterbestätten durch denjenigen Vertragsstaat, auf dessen Territorium sich das Gebiet befindet. Vertragsstaaten sind verpflichtet, in regelmäßigen Abständen – mindestens alle 10 Jahre – zu kontrollieren, ob es Stätten von außergewöhnlichem universellen Wert innerhalb ihres Hoheitsgebietes gibt, die einer Aufnahme bedürfen.³⁵

Im Anschluss an die Einreichung starten der Internationale Rat für Denkmalpflege (ICOMOS) und die IUCN den Evaluierungsprozess bezüglich einer möglichen Naturerbeeigenschaft und legen dem Welterbekomitee schließlich ihre Berichte vor. Das Komitee entscheidet auf Basis der Ergebnisse über eine Aufnahme in die Welterbeliste und hat hierbei drei Reaktionsmöglichkeiten. Akzeptiert das Komitee den Antrag, so hat die Zustimmung des bewerbenden Mitgliedsstaates eingeholt zu werden, welche den Prozess besiegelt. Somit ist eine neue Welterbestätte entstanden. Sieht das Komitee die Notwendigkeit zusätzliche Informationen einzuholen, oder soll eine tiefergehende Begutachtung beziehungsweise eine grundlegende Überarbeitung vorgenommen werden, so kann das Komitee den Antrag an den Vertragsstaat zurückverweisen. Dem Komitee steht es außerdem frei, die Stätte nicht in die Liste aufzunehmen, hierbei ist eine vorangehende Beratung mit dem Mitgliedsstaat vonnöten.³⁶

V. Implementation

1. Nationale Umsetzung

Die Umsetzung der *Welterbekonvention* auf nationaler Ebene erweist sich in vielen Fällen als schwierig. Grundsätzlich setzt sie sich aus periodischer Berichterstattung ergänzt durch reaktive Überwachung in Sonderfällen zusammen.

³⁵ UNESCO, Zwischenstaatliches Komitee für den Schutz des Kultur- und Welterbes der Welt (n 17) [62].

³⁶ Ibid [154]–[159].

Die regionale, periodische Berichterstattung an das Welterbekomitee ist als eine Form der Einhaltungüberprüfung ein vergleichsweise neues Phänomen im Bereich des internationalen Umweltrechts. Dies insbesondere, weil es zu einer Überprüfung des Standards der nationalen Umsetzung durch einen ständigen Ausschuss kommt.³⁷

Reaktive Überwachung bedeutet Berichterstattung des Sekretariats, anderer Dienststellen der UNESCO und der beratenden Gremien an das Komitee über den Erhaltungszustand bestimmter bedrohter Welterbegüter. Dies ist dann notwendig, wenn ein Vertragsstaat Arbeiten durchführen oder bewilligen möchte, welche Naturerbe beeinträchtigen könnten. In diesem Fall muss das Komitee benachrichtigt werden, das einen Untersuchungs- und Konsultationsprozess startet.³⁸

Der Grad der Umsetzung auf nationaler Ebene divergiert sehr stark. Teilweise lässt sich dies auf die Möglichkeit der *'upward derogation'* zurückführen, welche die *Welterbekonvention* in Artikel 5 einräumt. Dies bedeutet, dass nationale Standards folglich die Anforderungen des Vertrages selbst übersteigen dürfen.³⁹

Australien präsentiert sich in einigen Fällen als Vorreiterland der innerstaatlichen Umsetzung. So stellte sich etwa 1983 im *'Tasmanian Dam Case'* die verfassungsrechtliche Frage, inwiefern die *Welterbekonvention* in nationales Recht inkorporiert werden musste, um den Bau eines Staudammes zu verhindern, der direkte Auswirkungen auf das Weltnaturerbe der Tasmanischen Wildnis gehabt hätte.⁴⁰ In einer knappen Entscheidung des High Courts of Australia, dem höchsten Gericht Australiens, wurde die Befugnis des australischen Gesetzgebers festgelegt, bindende Regelungen zum Schutz des Weltkultur- und Naturerbes zu erlassen.⁴¹ Auch Großbritannien⁴² und Ägypten⁴³ beriefen sich bereits erfolgreich auf die *Welterbekonvention*, um Pla-

37 Bowman et al (n 5) 111.

38 UNESCO, Zwischenstaatliches Komitee für den Schutz des Kultur- und Welterbes der Welt (n 17) [169].

39 Bowman et al (n 5) 109.

40 *Commonwealth v Tasmania* (1983) 158 CLR 1.

41 Bowman et al (n 5) 95.

42 *Coal Contractors Limited v Secretary of State for the Environment and Northumberland County Council* (1993) EGCS 218.

43 *Southern Pacific Properties (Middle East) Ltd v Egypt* (1993) 32 ILM 933.

nungsprojekte mit Schädigungspotenzial zu stoppen.⁴⁴ Bis dato ist Australien jedoch der einzige Vertragsstaat, welcher eine starke Rechtsprechung zur *Welterbekonvention* entwickeln konnte.⁴⁵

Es sei angemerkt, dass das Umweltprogramm der Vereinten Nationen (UNEP, United Nations Environment Program) schon 2001 in seinem dritten Rechtsprogramm zur Weiterentwicklung des internationalen Umweltrechts (*Montevideo Programme III*)⁴⁶ die Bedeutung des Gerichtswesens für Umsetzung und Durchsetzung von internationalem Umweltrecht betonte und im Speziellen Richter als Schlüsselgruppe zur Kapazitätsbildung bezeichnete.⁴⁷ Diese Linie wurde auch in der vierten Version von 2008 beibehalten.⁴⁸

2. Beteiligung von nichtstaatlichen Organisationen

Eine Besonderheit der *Welterbekonvention* ist die Möglichkeit informeller Beteiligung von nichtstaatlichen Akteuren. In der Sphäre des internationalen Umweltrechts ist derlei rar. Das Übereinkommen sieht dies jedoch im Vertragstext selbst in Artikel 13(7) vor.

In der Praxis kam es etwa im Fall der Jabiluka Uranmine, die im Kakadu-Nationalpark in Australien gelegen ist, nach Ausschöpfung des innerstaatlichen Rechtsweges zur Anhörung eines Vertreters des Aborigines-Stammes Mirarr-Gundjeihmi vor dem Welterbekomitee.⁴⁹ Zusätzlich waren diverse nichtstaatliche Organisationen als Zuhörer zugegen und eine Stellungnahme des Geschäftsführers des betroffenen Energieunternehmens wurde verlesen.⁵⁰

Aufgrund dieser Beteiligungsmöglichkeiten und der Einbindung der IUCN betreffend der Aufnahmeanträge der *Welterbekonvention* erhöht sich die

44 Bowman et al (n 5) 104.

45 Ibid 95.

46 UNEP Governing Council, *The Programme for the Development and Periodic Review of Environmental Law for the 1st Decade of the 21st Century*, UN Doc UNEP/GC/DEC/21/23 (9. Februar 2001).

47 Ibid [3].

48 UNEP Governing Council, *Fourth Programme for the Development and Periodic Review of Environmental Law*, UN Doc UNEP/GC25/INF/15 (27. Oktober 2008).

49 UNESCO, Convention concerning the Protection of the World Cultural and Natural Heritage, World Heritage Committee Doc WHC-98/CONF.203/18 (29. Jänner 1999) 16 – 20.

50 Bowman et al (n 5) 112.

Transparenz und Chancen für eine gewisse Form der Mitwirkung der Gesellschaft am Erhalt des Welterbes entstehen.⁵¹

VI. Geschützte Tierarten, Illegaler Handel

1. Tier- und Pflanzenarten mit außergewöhnlichem universellen Wert

Der Zugang der *Welterbekonvention* zum Schutz gefährdeter Spezies ist der Schutz des Habitats, um somit ihr Überleben zu sichern.⁵² Das Übereinkommen darf aufgrund seines spezifischen Fokus allerdings nicht ohne Vorbehalte als allgemeines Schutzinstrument interpretiert werden. Der Anwendungsbe-
reich umfasst schließlich nur Stätten von außergewöhnlichem universellen Wert.⁵³

Bereits der Auswahlprozess für die Aufnahme in die Welterbeliste zeigt die Relevanz von Tier- und Pflanzenarten. Wie bereits erläutert legitimiert Kriterium (x) die Aufnahme einer Naturerbestätte aufgrund des Vorkommens einer gefährdeten Spezies, selbst wenn sich auf dem Gebiet sonst nichts per se Außergewöhnliches befindet. Dies bedeutet, dass indirekt auch einzelne Spezies geschützt werden können.⁵⁴ Insofern kann die Idee einer eigenen Kategorie von 'World Heritage Species' (Welterbespezies) als überschießend angesehen werden. Die Anwendbarkeit des Schutzregimes auf gefährdete Spezies findet sich schon indirekt in der *Welterbekonvention* selbst erfüllt.⁵⁵

Schützt das System der *Welterbekonvention* nur Stätten von außergewöhnlichem universellen Wert, so könnte man annehmen, dass spezifische Spezies wichtiger für Wissenschaft und Erhaltung sind als andere. Jedoch lässt sich aus der Praxis des Welterbekomitees weder eine klare Wertung noch ein spezifischer Fokus herauslesen. So schützen beispielsweise die grenzüberschreitenden Landschaften von Daurien in Russland und der Mongolei etwa ins-

51 Christine Fuchs, 'Environment, Role of Non-Governmental Organizations' in *Max Planck Encyclopaedia of Public International Law* (2009) [34].

52 Muffet (n 16) 353.

53 Bowman et al (n 5) 453 – 454.

54 Gillespie (n 20) 193.

55 Chris Wold et al, *World Heritage Species: A New Legal Approach to Conservation*, Discussion Paper (12. Mai 2005) 2.

besondere gefährdete Vogelarten, während die Lagune von El Vizcaíno in Argentinien vor allem Meeressäuger, wie Wale, Delfine oder Seelöwen, beherbergt und das Panda-Naturreservat in Sichuan, China sich auf den Erhalt des Großen Pandas fokussiert.⁵⁶

2. Naturerbe in Gefahr

Das Verhältnis von Kultur- (845) und Naturerbestätten (209) auf der Welterbeliste beläuft sich in etwa auf ein Verhältnis von vier zu eins. 17 der 213 Naturerbestätten befinden sich auf der Roten Liste; bei den Kulturerbestätten sind es lediglich 36. Das Verhältnis der gefährdeten Stätten ist mit 8 % bei den Naturerbestätten somit deutlich höher, während es bei den Kulturerbestätten nur etwa 4 % sind.

Von den 213 Naturdenkmälern auf der Welterbeliste wurden 135 unter anderem aufgrund von Kriterium (x) ausgewählt.⁵⁷ Unter diesen 135 Stätten, welche die wichtigsten natürlichen Habitate der am stärksten gefährdeten Tierarten beherbergen, sind 15 der 17 rot-gelisteten Naturerbestätten.

In fast allen dieser 15 rotgelisteten Naturerbestätten finden Wilderei, illegaler Holzeinschlag und/oder illegale Fischerei statt.⁵⁸ Abbildung 1 stellt die einzelnen rotgelisteten Naturerbestätten und deren jeweilige Gefährdung durch die angeführten illegalen Handlungen dar. Hier zeigt sich, dass laut World Wildlife Fund for Nature (WWF) 14 der 15 behandelten Naturstätten direkt von Wilderei bedroht sind.

Abbildung 1: Konkrete Bedrohung von rotgelisteten Naturerbestätten⁵⁹

Naturerbestätte	Wilderei	Illegaler Holzeinschlag	Illegale Fischerei
Nationalpark Manovo-Gounda St. Floris (Zentralafrikanische Republik)	X		
Nationalschutzgebiet Nimba-Berge (Elfenbeinküste, Guinea)	X	X	
Nationalpark Virunga (DRK)	X		

56 UNESCO World Heritage Centre (n 4).

57 Dalberg (n 7) 36.

58 Ibid 37 – 42.

59 Ibid.

Abbildung 1: Konkrete Bedrohung von rotgelisteten Naturerbestätten (*Fortsetzung*)

Naturerbestätte	Wilderei	Illegaler Holzeinschlag	Illegale Fischerei
Nationalpark Garamba (DRK)	X		
Nationalpark Kahuzi-Biega (DRK)	X		
Okapi-Wildreservat (DRK)	X	X	
Biosphärenreservat von Río Plátano (Honduras)	X	X	
Tropische Regenwälder von Sumatra (Indonesien)	X	X	
Nationalparks Turkana-See (Kenia)	X		
Regenwälder von Atsinanana (Madagaskar)	X	X	
Inseln und Schutzgebiete des Golfs von Kalifornien (Mexiko)	X		X
Nationalparks Aïr und Ténéré (Niger)	X	X	
Nationalpark Niokolo-Koba (Senegal)	X	X	
Wildreservat Selous (Tansania)	X		
Everglades Nationalpark (USA)			

Im Bezug auf die gesamten 135 Naturerbestätten, die aufgrund von Kriterium (x) ausgewählt wurden, sind etwa 60 Prozent von illegalen Aktivitäten bedroht. Etwa 30 % sind von Wilderei betroffen, 18 Prozent von illegalem Holzeinschlag und 12 % von illegaler Fischerei. Diese schädlichen Aktivitäten stellen ein nachhaltiges Hindernis für eine effektive Erhaltung dar.⁶⁰

Im *World Heritage Outlook* der IUCN, einem Bericht, der den Erhaltungszustand der Naturerbestätten bewertet, werden invasive Arten und der Klimawandel als aktuell größte Gefahren für das Weltnaturerbe angeführt.⁶¹ Betrachtet man die Liste der Gefahren allerdings im Detail, so fällt auf, dass Jagd, Fischerei, Holzeinschlag, Wilderei und Wildtierentnahme als jeweils einzelne Kategorien aufgeführt werden.⁶² All diese Gefahrenfelder spielen potenziell eine Rolle für die weitergehende Gefährdung des Naturerbes und vor allem auch für Handlungen im Zusammenhang mit illegalem internationalen Tier- und Pflanzenschmuggel.⁶³

⁶⁰ Ibid.

⁶¹ IUCN, *IUCN World Heritage Outlook 2: a conservation assessment of all natural world heritage sites* (2017) 32.

⁶² Ibid 33.

⁶³ Ibid 32.

Die Folge dieser illegalen Eingriffe manifestiert sich als systematische Abwertung des außergewöhnlichen universellen Wertes der Naturerbestätten und führt im Ernstfall, bei vollkommener Zerstörung des Naturerbes, sogar zur Löschung von der Welterbeliste. Der erste Fall dieser Art war 2007 die Löschung des Wildschutzgebietes der Arabischen Oryx im Oman. Dies geschah aufgrund einer starken Dezimierung des Oryx-Bestandes durch Wilderei und Zerstörung des natürlichen Lebensraumes und der Entscheidung des Omans, das Schutzgebiet zugunsten wirtschaftlicher Ambitionen um 90 % zu verkleinern. Das Welterbekomitee sah hierin die Vernichtung des außergewöhnlichen universellen Wertes und verhängte die Sanktion nach ausgiebiger Konsultation mit dem Vertragsstaat.⁶⁴

Andere negative Entwicklungen sind etwa in den Regenwäldern von Atsinanana in Madagaskar zu beobachten. Hier sind zwei Parks stark durch den internationalen illegalen Rosenholzhandel bedroht, obwohl ein nationales Holzeinschlag- und Exportverbot gilt. Durch die zunehmende Abholzung und die daraus resultierende Freilegung von größeren Regenwaldgebieten steigt die Bedrohung der gefährdeten Lemuren, welche zahlreich den Wilderern zum Opfer fallen. Somit zeigt sich der Zerstörungskreislauf von illegalen Aktivitäten. Derlei Wechselwirkungen – verstärkte Wilderei durch Abholzung – sind häufig. Zugangserleichterungen für Wilderer schafft allerdings auch der per se nicht verbotene Infrastrukturausbau durch Akteure der Rohstoffindustrie.⁶⁵ Von den Gewinnen aus dem illegalen Handel verbleibt nicht einmal 1 Prozent in Madagaskar, da vor allem einzelne international tätige Holzbaurone aus den Zerstörungshandlungen profitieren.⁶⁶

Verbesserte Zukunftsprognosen konnten von der IUCN im Jahr 2017 allerdings für 14 Stätten gestellt werden.⁶⁷ Unter ihnen der Nationalpark Comoé in der Elfenbeinküste, der 2003 auf die Rote Liste gesetzt worden war. Aufgrund einer innenpolitisch instabilen Situation sah man sich mit illegalem Goldabbau, Wilderei und Ergreifen von Wildtieren konfrontiert. Nachdem sich die politische Lage im Jahr 2012 beruhigt hatte, wurden Schutzsysteme wieder in

64 Roni Amelan, 'Oman's Arabian Oryx Sanctuary: First Site Ever to Be Deleted from UNESCO's World Heritage List', UNESCO World Heritage Centre (news page, 28. Juni 2007).

65 Dalberg, *Protecting People Through Nature: Natural World Heritage Sites as Drivers of Sustainable Development*, WWF Report 2016 (2016) 26.

66 Ibid 21.

67 IUCN (n 61) 9.

Kraft gesetzt und die vorhandenen Tierspezies begannen sich zu erholen. Ein wichtiges Element des neuen Managementplans ist die Einbindung lokaler Gemeinschaften, die sich am Monitoring beteiligen. 2017 wurde das Gebiet von der Roten Liste gelöscht. Da die Gefahren jedoch fortbestehen, sind gezielte und anhaltende Gegenmaßnahmen in den kommenden Jahren besonders wichtig, um den natürlichen Lebensraum der Tierarten zu schützen.⁶⁸

Eine weitere Erfolgsgeschichte stammt aus dem iSimangaliso Wetlandpark in Südafrika. Hier wurden durch sanften Tourismus zahlreiche Arbeitsstellen geschaffen und die ansässige Bevölkerung beteiligt sich aktiv am Schutz des Naturerbes.⁶⁹

Positive Auswirkungen der Einbindung lokaler Gemeinschaften sind auch im Chitwan-Nationalpark in Nepal zu verzeichnen. Hier konnte man die natürlichen Ressourcen (Nashorn-, Tiger- und Elefantenpopulationen) innerhalb des Parks wieder regenerieren, indem man eine Pufferzone einrichtete und mit der nepalesischen Armee kooperierte. Diese sorgt nun für Sicherheit, sodass Wilderei stark abgenommen hat.⁷⁰

Diese Beispiele deuten an, dass die *Welterbekonvention* der Wilderei und dem Schmuggel von Tier- und Pflanzenarten mittels verstärkter Sicherheitsvorkehrungen tatsächlich entgegenzutreten kann.

VII. Artenschutz und Internationale Zusammenarbeit

1. Assistenz im Artenschutz

Die *Welterbekonvention* kann den Artenschutz verschiedentlich unterstützen und somit einen Beitrag zum Kampf gegen den illegalen Handel in Fauna und Flora leisten. Allein durch die Aufnahme in die Welterbeliste erhalten Naturerbestätten internationale Anerkennung⁷¹ und dies gibt den Staaten auf wirtschaftlicher Ebene die Chance, ihre außergewöhnlichen natürlichen Lebensräume weltweit zu präsentieren. Zusätzlich eröffnen sich für Entwick-

68 Dalberg (n 65) 19.

69 Bastian Bertzky et al, 'World heritage and species, safe havens for wildlife?' (2014) 73 *World Heritage* 28, 37.

70 Dalberg (n 65) 26.

71 Bowman et al (n 5) 454.

lungsländer Finanzierungsmöglichkeiten und Unterstützungsangebote in technischen Bereichen. Dies erleichtert die Etablierung von umfassenden Schutzeinrichtungen für die Naturerbestätten auf ihrem Territorium. Die *Welterbekonvention* war das erste der 'großen vier' Umweltabkommen, welches wirtschaftlich schwächeren Vertragsstaaten materielle Vorteile für den Schutz ihrer Naturerbestätten in Aussicht stellte. Mittlerweile haben auch die anderen drei Übereinkommen, das *Übereinkommen über den internationalen Handel mit gefährdeten Arten freilebender Tiere und Pflanzen (CITES)*,⁷² das *Übereinkommen zur Erhaltung der wandernden wildlebenden Tierarten (CMS)*⁷³ sowie das *Übereinkommen über Feuchtgebiete, insbesondere als Lebensräume für Wat- und Wasservögel von internationaler Bedeutung (Ramsar-Konvention)*⁷⁴ dieses System eingeführt.⁷⁵

Weiters besteht die Möglichkeit im technischen Bereich Assistenz anzubieten sowie mittels Aufklärungskampagnen und mit staatlichen oder nichtstaatlichen Akteuren beziehungsweise mit Interessensvertretern relevanter Wirtschaftssektoren zusammenzuarbeiten.⁷⁶ Insbesondere aufgrund der hohen Anzahl an Vertragsstaaten erwächst aus der *Welterbekonvention* die Chance, Kooperationen sowohl mit Staaten, welche besonders bedrohten Wildtierbestand aufweisen, als auch mit finanziell starken Staaten und mit Staaten mit großem Territorialgebiet einzugehen.⁷⁷

Um effektiv agieren zu können, ist es allerdings essentiell, die *Welterbekonvention* als Teil des Gefüges internationaler Umweltschutzabkommen zu interpretieren. Die Aufforderung, mit internationalen und nationalen, staatlichen und nichtstaatlichen Organisationen zusammenzuarbeiten, welche ein ähnliches Ziel verfolgen wie die *Welterbekonvention*, findet sich im Übereinkommen selbst in Artikel 13(7) sowie in den *Richtlinien*.⁷⁸

72 *Convention on international trade in endangered species of wild fauna and flora*, eröffnet zur Unterzeichnung 3. März 1973, 994 UNTS 243 (in Kraft getreten 1. Juli 1975).

73 *Convention on the conservation of migratory species of wild animals*, eröffnet zur Unterzeichnung am 6. November 1979, 1651 UNTS (in Kraft getreten 1. November 1983).

74 *Convention on wetlands of international importance especially as waterfowl habitat*, eröffnet zur Unterzeichnung 2. Februar 1971, 996 UNTS 245 (in Kraft getreten 21. Dezember 1975).

75 Bowman et al (n 5) 454.

76 Bertzky et al (n 69) 34.

77 Bowman et al (n 5) 453.

78 UNESCO, Zwischenstaatliches Komitee für den Schutz des Kultur- und Welterbes der Welt (n 17) [41]–[44].

2. Zusammenarbeit der Multilateralen Umweltabkommen

Die *Welterbekonvention* ist Teil des Biodiversitätsnetzwerks, das sich aus den multilateralen Umweltabkommen zusammensetzt.⁷⁹ Diese thematisch zusammenhängende Gruppe von Konventionen fördert verstärkte Kooperation und Koordination im Bereich der Erhaltung und der nachhaltigen Nutzung der natürlichen Ressourcen.⁸⁰ Intensive Diskussionen zur tatsächlichen Effektivität der einzelnen Übereinkommen auf nationaler Ebene haben die Notwendigkeit verstärkter Zusammenarbeit auf Sekretariatsbene aufgezeigt. Hierfür formte sich die Liaison Group of Biodiversity-related Conventions,⁸¹ welche neben der *Welterbekonvention* auch *CITES*, die *Biodiversitätskonvention*, die *CMS* und die *Ramsar-Konvention* umfasst.⁸² Die *Biodiversitätskonvention* wird innerhalb dieses Konstruktes als Agendasetter angesehen und gibt somit im Abstrakten den Strategierahmen vor.⁸³

Kritik an den Umweltabkommen einzeln und in Beziehung zueinander wird einerseits wegen der mangelnden Leistungsfähigkeit und den fehlenden Ressourcen geübt.⁸⁴ Andererseits ist innerhalb der einzelnen Übereinkommen eine starke Divergenz zwischen den Umsetzungspraktiken der Vertragsparteien zu erkennen.⁸⁵ Es ist wichtig zu sehen, dass sich die Konventionen in ihrem Entstehungsgrund und ihrem Anwendungsbereich gleichen mögen, jedoch abgesehen von der *Biodiversitätskonvention*, welche auf gleiche und faire Verteilung der Früchte aus nachhaltiger Nutzung der natürlichen Ressourcen sowie auf deren Erhaltung abzielt, die anderen Übereinkommen auf spezifische Aspekte fokussiert sind. Die *Welterbekonvention* konzentriert ihre

⁷⁹ Bowman et al (n 5) 478.

⁸⁰ Konrad von Moltke, 'On Clustering International Environmental Agreements' (Webseite, Juni 2001) 3.

⁸¹ Katharina Rogalla von Bieberstein et al, 'Improving collaboration in the implementation of global biodiversity conventions' (2019) 33(4) *Conservation Biology* 821, 822; Bowman et al (n 5) 452.

⁸² Secretariat of the Convention on Biological Diversity, 'Liaison Group of Biodiversity-related Conventions' (Webseite, 2019).

⁸³ UNESCO World Heritage Centre, *The UNESCO World Heritage Centre's Natural Heritage Strategy*, World Heritage Committee document WHC-06/30.COM/INF.6 A (2006) 3.

⁸⁴ Von Bieberstein et al (n 81) 822.

⁸⁵ Aðalheiður Jóhannsdóttir, Ian Cresswell und Peter Bridgewater, 'The Current Framework for International Governance of Biodiversity: Is It Doing More Harm Than Good?' (2010) 19(2) *RECIEL* 139, 146.

Ressourcen auf den Erhalt des Welterbes, während etwa CITES dem illegalen Handel von bedrohten Spezies Einhalt gebieten möchte.⁸⁶

Ein Bericht der jeweiligen Sekretariate der multilateralen Umweltabkommen aus dem Jahr 2005 über eine mögliche bessere Zusammenarbeit sah unter anderem Handlungsbedarf im Bereich der Harmonisierung von Formalitäten bei Richtlinien oder Kriterien.⁸⁷ Auch die Vereinheitlichung von Definitionen wie zum Beispiel ‘nachhaltige Nutzung’ oder ‘wandernde Arten’ wurde als zielführend angesehen.⁸⁸ Hier findet sich der Vorschlag, Kriterien für standortbezogene Maßnahmen etwa im Rahmen der *Welterbekonvention* durch die Kriterien anderer Übereinkommen zu ergänzen.⁸⁹ So wäre es beispielsweise zweckmäßig, bei der Beurteilung der Dringlichkeit von erhaltenden Maßnahmen bezüglich bedrohter Tierarten auf die in den Anhängen von CITES getroffenen Gefährdungseinstufungen zurückzugreifen.⁹⁰

Aus Gründen der effizienten Zusammenarbeit entstanden und entstehen weiterhin weitläufige Verflechtungen zwischen den Übereinkommen mittels Memoranda of Understanding. Außerdem werden gemeinsame Arbeitsprogramme eingerichtet.⁹¹

3. Welterbekonvention und CITES

Schätzungen zufolge sind etwa 45 % der Naturerbestätten auf der Welterbeliste, die ebenfalls unter dem CITES-Regime geschützt sind, von illegalen Aktivitäten im Zusammenhang mit Wildtieren oder Pflanzen betroffen.⁹² Eine effiziente und koordinierte Reaktion auf illegalen Handel in Fauna und Flora bedarf einer Bündelung der Mechanismen beider Konventionen. Die *Welter-*

86 Von Bieberstein et al (n 81) 822.

87 UNEP Convention on Biological Diversity, Ad Hoc Open-Ended Working Group on Review of Implementation of the Convention, *Cooperation with other conventions, organizations and initiatives, and engagement of stakeholders in the implementation of the Convention*, UN Doc UNEP/CBD/WG-RI/1/7/Add.2 (14. Juli 2005) [44].

88 Bowman et al (n 5) 480.

89 UNEP Convention on Biological Diversity, Ad Hoc Open-Ended Working Group on Review of Implementation of the Convention (n 87) [44].

90 Ibid [42].

91 Jóhannsdóttir, Cresswell und Bridgewater (n 85) 143.

92 John E Scanlon, ‘CITES and World Heritage Convention, Joining forces against wildlife trafficking’ (2018) 87 *World Heritage* 24, 26.

bekonvention und *CITES* sind in diesem Bereich aufgerufen, ihre Kompetenzen ergänzend zu strukturieren, um einen lückenlosen Schutz entlang der gesamten Wertschöpfungskette des illegalen Tier- und Pflanzenhandels zu gewährleisten.⁹³ Während die *Welterbekonvention* sich nämlich insbesondere auf den Schutz der Naturerbestätten beschränkt und deshalb auf das Monitoring der illegalen Aktivitäten innerhalb der Stätten beziehungsweise im direkt angrenzenden Gebiet fokussiert ist, arbeiten die *CITES*-Akteure vorwiegend mit den Herkunfts-, Transit- und Verbraucherländern auf einer breiteren nationalen Ebene zusammen.

3.1. Monitoring-Programme

Schon 1986 nahm das Welterbekomitee Kontakt mit dem *CITES* Sekretariat auf, um Kooperationsmöglichkeiten im Kampf gegen den illegalen Elfenbeinhandel auszuloten. In diesem Fall waren das Wildreservat Selous in Tansania und der Nationalpark Mana Pools in Simbabwe betroffen; beide wurden über Kriterium (x) auf die Welterbeliste aufgenommen und haben anhaltende Probleme mit Wilderei.⁹⁴

Heute gibt es verschiedene Programme, für die sowohl *CITES* als auch die *Welterbekonvention* bedeutsam sind. Beispielhaft hierfür ist MIKE (*CITES Monitoring the Illegal Killing of Elephants Programme*), ein standortbezogenes Monitoring-Programm, das illegales Töten von Elefanten aufzeichnet und Zunahmen von Wilderei-Fällen vermerkt. Es wird in 13 Naturerbestätten in Afrika, auf denen sich etwa 30 – 40 % des internationalen Elefantenbestandes befindet, eingesetzt. So sollen akute Maßnahmen gesetzt und organisierte Schmuggelgruppen gestoppt werden.⁹⁵ Ein ähnliches System steht hinter SMART (*Spatial Monitoring and Reporting Tool*), das Daten, welche von Parkrangern auf ihren Kontrollgängen gesammelt werden, zusammenfasst und grafisch darstellt.⁹⁶

93 Dalberg (n 7) 29.

94 UNESCO World Heritage Committee, *Report of the Rapporteur*, Doc CC-86/CONF.003/10 (8. Dezember 1986) [18–[19].

95 Scanlon (n 92) 26.

96 John E Scanlon and Julian Blanc, 'SMART Approach to tackling crisis in World Heritage sites' (2014) 73 *World Heritage* 72, 73.

3.2. Vertiefte Zusammenarbeit

Weitere Kooperationsmöglichkeiten gibt es im Zusammenhang mit nachhaltigem Management von Fischbeständen. Naturerbestätten sind grundsätzlich absolut geschützte Zonen, lediglich in Ausnahmefällen ist eine schonende, nachhaltige Nutzung der natürlichen Ressourcen möglich.⁹⁷ Dies ist vor allem bei maritimen Schutzgebieten der Fall. Hier ist oftmals der Fischfang außerhalb der strengen Schutzzonen erlaubt. Ein Zusammenspiel mit *CITES* ist etwa im Kontext von Haifischbestandsmanagement zwischen dem Schutz für Tourismuszwecke und legaler, nachhaltiger Nutzung denkbar.⁹⁸

Eine zweite Möglichkeit besteht in der Einsetzung von Mechanismen zum Schutz der Fischarten Vaquita und der Totoaba. Beide Fischarten finden sich insbesondere auf den Inseln und Schutzgebieten des Golfs von Kalifornien in Mexiko. Die *Welterbekonvention* setzt standortspezifische Maßnahmen wie Verbote gewisser Fanginstrumente, während *CITES* den Stopp des internationalen illegalen Handels bezweckt.⁹⁹ In der jüngeren Vergangenheit haben die Sekretariate beider Übereinkommen die Kooperation bereits verstärkt, um diese Fischarten vor dem Aussterben zu retten.¹⁰⁰

4. 'No-Go-Commitment'

In vielen Fällen bietet die *Welterbekonvention* schlicht eine zusätzliche rechtliche Schutzschicht für außergewöhnliche Gebiete der Erde.¹⁰¹ Hinzu kommt, dass die *Welterbekonvention* das einzige Übereinkommen ist, welches ein sogenanntes 'No-Go-Commitment' mit wichtigen Akteuren der Rohstoffindustrie, vertreten durch den ICMM (International Council on Mining and Metals), eine internationale Organisation für nachhaltige Entwicklung in der

97 UNESCO et al, *Managing Natural World Heritage*, World Heritage Resource Manual (Juni 2012) 57.

98 Scanlon (n 92) 28.

99 Ibid 29.

100 Ibid.

101 James R Allan et al, 'Gaps and opportunities for the World Heritage Convention to contribute to global wilderness Conservation' (2018) 32(1) *Conservation Biology* 116, 121.

Bergbau- und Metallindustrie, vorweisen kann.¹⁰² Dieses 2003 abgeschlossene 'No-Go-Commitment' soll Vertragspartner und wichtige Akteure der Rohstoffindustrie auffordern, keine mineralgewinnenden Tätigkeiten innerhalb von Welterbestätten zuzulassen und die ansässige Rohstoffindustrie an schädigenden Handlungen zu hindern.¹⁰³ Es darf aber nicht negiert werden, dass hier lediglich eine kleine Zahl an höchst gefährlichen Eingriffen verhindert werden kann; die Breitenwirkung ist überschaubar.¹⁰⁴

5. Zukünftige Handlungsoptionen

Eine Möglichkeit zur Sicherstellung zukünftiger Effektivität besteht zweifellos darin, die Multilateralen Umweltabkommen zusammenzuschließen und sie als einzelne Protokolle unter der *Biodiversitätskonvention* zu verwirklichen. Wissenschaftliche Erkenntnisse, Informationspools und Datenbanken stünden in diesem Fall abrufbereit.¹⁰⁵ Die Konzentration von Intelligenz und Mitteln würde klarerweise zu einer Reduzierung des finanziellen Aufwandes führen. Freigewordenes finanzielles Potenzial wäre somit effektiv im Schutz und Management einsetzbar.

Die praktische Umsetzbarkeit dieses Konzeptes hängt jedoch nicht unmaßgeblich vom Willen der einzelnen Konventionsherren ab, Teile ihrer Verantwortlichkeiten abzugeben und sich einem anderen internationalen Instrument unterzuordnen. Im Rahmen der *Welterbekonvention* scheint dies wenig wahrscheinlich, schließlich würde die UNESCO ihre Kapazitäten hier an ein Instrument abgeben, welches aus dem Einflussbereich der UNEP stammt.

Eine weitere Idee, welche erstmals 1962 Eingang in den internationalen Diskurs fand, ist die Etablierung eines einheitlichen Klassifikationsschemas für alle geschützten Gebiete.¹⁰⁶ Die IUCN hat ein derartiges System mit sechs Kategorien entwickelt, welches im Rahmen des fünften Welterbeparkongresses

¹⁰² Aviva Investors, Investec Asset Management and WWF, *Safeguarding outstanding natural value: The role of institutional investors in protecting natural World Heritage sites from extractive activity* (September 2015) 30.

¹⁰³ UNESCO, World Heritage Committee, *Emerging trends and general issues*, World Heritage Committee Decision 37 COM 7 (2013).

¹⁰⁴ Marton-Lefèvre (n 6) 17.

¹⁰⁵ Jóhannsdóttir, Cresswell und Bridgewater (n 85) 147.

¹⁰⁶ Gillespie (n 20) 38.

im Jahr 2003 angenommen wurde. Einige Regelungssysteme, darunter die *Welterbekonvention*, haben dieses allerdings nicht übernommen.¹⁰⁷

VIII. Ausblick und Conclusio

Die *Welterbekonvention* kann effektiv zur Bekämpfung des illegalen Handels in Fauna und Flora beitragen, wenn sich die Idee des Welterbes weiterhin etabliert und zusätzliche Schutzmaßnahmen getroffen werden. Durch ein Zusammenspiel mit *CITES* können Monitoringprozesse verbessert und somit Reaktionssysteme geplant und gezielt eingesetzt werden. Der Fonds und die großzügigen Beiträge durch die UNESCO bieten großes Potential für die Unterstützung wirtschaftsschwacher Staaten.

Nationale Souveränität mag ein Hindernis für die spontane Rettung einzelner Welterbestätten darstellen, von akuten internationalen Reaktionsmöglichkeiten abgesehen, ist jedoch auf lange Frist eventuell Gegenläufiges möglich. Durch fehlende internationale Intervention bleiben die Welterbestätten in ihrem heimischen Territorium eingebunden und ein Zugehörigkeitsgefühl kann entstehen. Dies ist kaum vorstellbar, wenn sich Gebiete zwar innerhalb der Staatsgrenzen befinden, das 'Diktat' allerdings von außen kommt. So entstehen möglicherweise Fremdkörper, an deren Schutz wenig Interesse besteht, da aus illegalen Aktivitäten finanzielle Vorteile erlangt werden können.

Aus diesem Grund liegt die Zukunft der erfolgreichen Erhaltung des Welterbes wohl neben verstärkter Zusammenarbeit der Organe der multilateralen Umweltabkommen in einer umfassenden Einbindung der lokalen Gemeinschaften, sodass diese sich den Stätten verbunden fühlen. So können sich die Interessen der lokalen Gemeinschaften an schnellem Geld durch Wilderei hin zu nachhaltiger Nutzung und Einleitung schützender Maßnahmen verlagern. Natürlich bedeutet all dies nicht, dass illegale Aktivitäten von selbst verschwinden und die Menschen rund um Naturerbestätten über Nacht jegliche nachteilige Handlung unterlassen werden. Vielmehr könnte das Ziel darin liegen, Bewusstsein und Achtsamkeit zu fördern, um somit Dynamiken innerhalb der Gemeinschaften auszulösen, die derlei Handlungen als unsittlich

¹⁰⁷ Ibid.

verurteilen. Das Recht allein mag in einer Situation, in der Zuwiderhandeln schnellen Nutzen bringt und die Regelbefolgung erst zeitlich versetzt Früchte trägt, nicht genügen.

Bibliographie

- Allan, James R et al, 'Gaps and opportunities for the World Heritage Convention to Contribute to Global Wilderness Conservation' (2018) 32(1) *Conservation Biology* 116
- Amelan, 'Oman's Arabian Oryx Sanctuary: First Site Ever to Be Deleted from UNESCO's World Heritage List', UNESCO World Heritage Centre (News page, 28. Juni 2007) <<https://whc.unesco.org/en/news/362/>>
- Aviva Investors, Investec Asset Management and WWF, *Safeguarding outstanding natural value: The role of institutional investors in protecting natural World Heritage sites from extractive activity*, London: WWF UK, September 2015
- Bertzky, Bastian et al, 'World heritage and species, safe havens for wildlife?' (2014) 73 *World Heritage* 28
- Bowman, Michael et al, *Lyster's International Wildlife Law*, Cambridge: Cambridge University Press, 2010.
- Brown Weiss, Edith, 'International Environmental Law: Contemporary Issues and the Emergence of a New World Order' (1993) 81 *Georgetown Law Journal* 675
- Dalberg, *Not for Sale: Halting the Illegal Trade of CITES Species from World Heritage Sites* Gland: WWF, 2017
- Dalberg, *Protecting People Through Nature: Natural World Heritage Sites as Drivers of Sustainable Development*, WWF Report 2016, Gland: WWF, 2016
- Francioni, Francesco (Hrsg.), *The 1972 World Heritage Convention: A Commentary*, Oxford: Oxford University Press, 2008
- Fuchs, Christine, 'Environment, Role of Non-Governmental Organizations' in *Max Planck Encyclopaedia of Public International Law*, New York, NY: Oxford University Press, 2009
- Gillespie, Alexander, *Biodiversity and International Law*, Cheltenham: Edward Elgar Publishing, 2011
- IUCN *A Review of the Impact of IUCN Resolutions on International Conservation Efforts*, Gland: IUCN, 1981

- IUCN, *IUCN World Heritage Outlook 2: a conservation assessment of all natural world heritage sites*, Gland: IUCN, 2017
- Jóhannsdóttir, Aðalheiður, Ian Cresswell, und Peter Bridgewater, 'The Current Framework for International Governance of Biodiversity: Is It Doing More Harm Than Good?' (2010) 19(2) *RECIEL* 139
- Marton-Lefèvre, Julia et al, 'World Heritage and Our Protected Planet' (2014) 73 *World Heritage* 17
- Muffet, Wm Carroll, 'International Protection of Wildlife' in Fred L Morrison und Rüdiger Wolfram (Hrsg.), *International, Regional and National Environmental Law*, The Hague, Boston: Kluwer Law International, 2000, 343
- Odendahl, Kerstin, 'World Natural Heritage', in *Max Planck Encyclopaedia of Public International Law*, New York, NY: Oxford University Press, 2015
- Scanlon, John E and Julian Blanc, 'SMART Approach to Tackling Crisis in World Heritage Sites' (2014) 73 *World Heritage* 72
- Scanlon, John E, 'CITES and World Heritage Convention, Joining forces against wildlife trafficking' (2018) 87 *World Heritage* 24
- Secretariat of the Convention on Biological Diversity, 'Liaison Group of Biodiversity-related Conventions' (Webseite, 2019) <<https://www.cbd.int/blg/>>
- Strydom, Hennie, 'Transnational Organised Crime and the Illegal Trade in Endangered Species of Wild Fauna and Flora' in Pierre Hauck und Sven Peterke (Hrsg.), *International Law and Transnational Organised Crime*, Oxford: Oxford University Press, 2016, 264
- UN Treaty Collection, 'Convention for the protection of the world cultural and natural heritage' (Webseite, 2019) <https://treaties.un.org/Pages/showDetails.aspx?objid=08000002800fece0&clang=_en>
- UN-GRASP (Great Apes Survival Partnership), 'About GRASP' (Webseite, 2019) <<https://www.un-grasp.org/about-grasp/>>
- UN, Audiovisual Library of International Law, 'Convention concerning the Protection of the World Cultural and Natural Heritage, Paris 16. November 1972' (Webseite, 2019) <<https://legal.un.org/avl/ha/ccpwnh/ccpwnh.html>>
- UNEP Convention on Biological Diversity, Ad Hoc Open-Ended Working Group on Review of Implementation of the Convention, *Cooperation with other conventions, organizations and initiatives, and engagement of stakeholders in the implementation of the Convention*, UN Doc UNEP/CBD/WG-RI/1/7/Add.2 (14. Juli 2005)

UNESCO et al, *Managing Natural World Heritage*, World Heritage Resource Manual, Paris: UNESCO, Juni 2012

UNESCO World Heritage Centre, 'Funding' (Webseite, 2019) <<https://whc.unesco.org/en/funding/>>

UNESCO World Heritage Centre, *The UNESCO World Heritage Centre's Natural Heritage Strategy*, World Heritage Committee document WHC-06/30.COM/INF.6 A, Paris: UNESCO, 2006

UNESCO World Heritage Committee, *Report of the Rapporteur*, Doc CC-86/CONF.003/10 (8. Dezember 1986)

UNESCO, 'Rapid Response Facility' (Webseite, 2019) <<https://whc.unesco.org/en/rapidresponse/>>

UNESCO, 40 C/5, *Volume 1: Draft Resolutions, Second biennium 2020 – 2021*, Paris: UNESCO, 2019

UNESCO, Zwischenstaatliches Komitee für den Schutz des Kultur- und Welterbes der Welt, *Richtlinien für die Durchführung des Übereinkommens zum Schutz des Kultur- und Naturerbes der Welt*, World Heritage Committee Doc WHC.15/01 (8. Juli 2015)

UNESCO, World Heritage Centre, 'World Heritage List' (Webseite, 2019) <<https://whc.unesco.org/en/list/?type=natural&danger=1>>

University of Joensuu and UNEP, *Multilateral Environmental Agreement Negotiator's Handbook*, Joensuu and Nairobi: University of Joensuu Department of Law and UNEP, 2. Aufl., 2007

von Bieberstein, Katharina Rogalla et al, 'Improving collaboration in the implementation of global biodiversity conventions' (2019) 33(4) *Conservation Biology* 821

von Moltke, Konrad, 'On Clustering International Environmental Agreements' (Webseite, Juni 2001) <<https://pdfs.semanticscholar.org/e072/f39d4447d6fbb9cecegea30abf8344d428c1d.pdf>>

Wold, Chris et al, *World Heritage Species: A New Legal Approach to Conservation*, Discussion Paper, Portland, OR: International Environmental Law Project of Lewis & Clark Law School, 12. Mai 2005

Zitierte Entscheidungen

Coal Contractors Limited v Secretary of State for the Environment and Northumberland County Council (1993) EGCS 218

Commonwealth v Tasmania (1983) 158 CLR 1

Southern Pacific Properties (Middle East) Ltd v Egypt (1993) 32 ILM 933

Chapter Nine

Criminalisation of Wildlife Trafficking

GIAN EGE & GEORGINA HOWE

While it is widely accepted that criminal law plays an important role in combatting wildlife trafficking, the theoretical foundation of criminalisation is poor. Nonetheless, the ultima ratio character of criminal law calls for a sound theoretical justification of criminal offences. This chapter examines different theoretical approaches that could potentially justify the criminalisation of activities related to wildlife trafficking, provides an overview of relevant criminal offences, and identifies challenges to effective implementation.

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I. Introduction

The issue of wildlife trafficking is widely covered by news articles, reports by non-governmental organisations (NGOs), and academic literature. It is the target of a range of State responses. When discussing this subject, authors

tend to use the term ‘wildlife trafficking’ interchangeably with the term ‘wildlife crime’. The latter term is used to

refer to the taking, trading (supplying, selling or trafficking), importing, exporting, processing, possessing, obtaining and consumption of wild flora and fauna, including timber and other forest products, in contravention of national or international law. Broadly speaking, wildlife and forest crime is the illegal exploitation of the world’s wild flora and fauna.¹

There is no universally accepted definition of these terms and different jurisdictions and organisations employ different terminology.² The synonymous use of the terms wildlife trafficking and wildlife crime implies that the former refers to criminal actions; but does it really?

Laws for the protection of wildlife come in many forms, including conservation or wildlife management laws, species protection laws, and criminal laws.³ Criminal justice measures are an integral part of any strategy to prevent and combat wildlife trafficking. The criminal justice response to wildlife trafficking involves the detection, reporting, and investigation of criminal activities, together with the arrest, prosecution, conviction, and sentencing of offenders, as well as possible appeals. Criminal justice comprises the work of multiple State agencies and sometimes requires cross-border cooperation between States. Law enforcement is the most immediate and often the most visible way to suppress wildlife trafficking. It raises the ‘cost’ to perpetrators through the probability of being caught, the probability of conviction, and the sanctions applied if convicted.

Offences relating to wildlife trafficking, their elements, and penalties vary greatly between jurisdictions.⁴ International law does not provide an exact framework for the content and design of such offences. For instance, although the *Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES)*⁵ makes express reference to forbidding the

1 UNODC, ‘Wildlife and Forest Crime: Overview’ (Web page, 2019).

2 See further Chapter One of this volume.

3 Angus Nurse, *Policing Wildlife: Perspectives on the Enforcement of Wildlife Legislation* (2015) 12.

4 UNODC, *Wildlife and Forest Crime Analytic Toolkit* (rev ed 2012) 23; Tanya Wyatt, *Wildlife Trafficking: A Deconstruction of the Crime, the Victims and the Offenders* (2013) 106.

5 Opened for signature 3 March 1973, 993 UNTS 243 (entered into force 1 July 1975).

international trade in endangered species, it does not contain provisions criminalising such activities.⁶ At the domestic level, most jurisdictions' offences relating to wildlife trafficking are set out in specific statutes relating to environmental law, wildlife, forests, endangered species, protected areas, conservation, or biodiversity. It is less common to find such offences in penal codes. Nevertheless, general rules relating to criminal responsibility, criminal procedure, and sentencing are relevant to wildlife trafficking offences as they determine the ways in which criminal offences are designed, criminal liability is established, and the degree to which liability extends to attempts and participation.⁷

Faced with international wildlife trafficking networks, criminal law often appears to States as the most obvious measure to combat the crime type. Particular emphasis is put on the implementation of the measures provided by criminal and criminal procedural laws, while the process of criminalisation itself receives less attention. Since criminal law is the most severe measure at a State's disposal, it should only be applied as a last resort. This *ultima ratio* character and need for sound justification of each criminal offence, however, may not always receive the necessary emphasis. Criminalisation of any kind calls for a coherent theoretical basis, since the end cannot justify the means. This chapter examines different theoretical approaches that can serve to justify the criminalisation of wildlife trafficking related activities and provides an overview of criminal offences concerning wildlife trafficking.

II. Criminalisation

1. Setting the paradigm

The relationship between human beings and the environment, and how this relationship informs the analysis of environmental harm, can best be viewed through the lens of three philosophical approaches: anthropocentrism, biocentrism, and ecocentrism. Each approach provides different perspectives on how environmental problems are conceived, the role of

⁶ See further Chapter Six of this volume.

⁷ UNODC (n 4) 25, 31.

human beings in creating these problems, and legislating around environmental issues.⁸ The discussion of these different theories is pivotal. Defining the extent to which harm to the environment is acceptable also defines the possible boundaries of the use of criminal law. Depending on the institutional and cultural context, a State's wildlife laws are determined by the primacy of anthropocentric, biocentric, or ecocentric views.⁹

Anthropocentric philosophy has for a long time dominated how human beings approached their relationships to other species and nature in general.¹⁰ This approach views human beings as fundamentally superior to all non-human nature. According to Robyn Eckersley, anthropocentrism implies 'that humankind is the only or principal source of value and meaning in the world, and that non-human nature is there for no other purpose but to serve humankind.'¹¹ Non-human nature should thus be utilised in a manner that is most beneficial to the self-interest and quest for maximum individual liberty of human beings. Environmental protection in the form of sustainable development strategies is only considered if relevant to immediate economic interests or longer-term economic prospects. Careful management of natural resources is favoured if their total destruction would come at an economic loss for human beings. Therefore, environmental laws facilitate, privilege and rationalise human benefits in accordance with liberalism and neo-classical political economy. Environmental protection through market regulation is generally preferred over the use of criminal law.¹² If taken, policy and enforcement measures are oriented towards human interest.¹³

Biocentrism focuses on moral equality between all living species. All non-human species have intrinsic value and all life-forms enjoy equal recognition. Where human and environmental interests conflict, the environment is prioritised over the human agenda. Therefore, the

8 Mark Halsey and Rob White, 'Crime, Ecophilosophy and Environmental Harm' (1998) 2(3) *Theoretical Criminology* 345, 347.

9 Nurse (n 3) 18.

10 Wyatt (n 4) 62.

11 Robyn Eckersley, *Environmentalism and Political Theory: Toward an Economic Brown* (1992) 51.

12 Halsey and White (n 8) 349 – 352.

13 Nurse (n 3) 17.

realisation of any species' vital needs must not be impeded through the satisfaction of human desire.¹⁴ Conservation policies are favoured for equity between the species.¹⁵ Any strain on the environment should be reduced, for example through decentralisation of economic activity, redistribution of goods and services, valuing indigenous forms of knowledge, and reorientating modes of production for direct consumption rather than profit.¹⁶ Biocentric ecological management advocates for the mass preservation of wilderness, protection of species, and restoration of damaged environmental areas.¹⁷

Ecocentrism seeks to balance anthropocentric and biocentric approaches¹⁸ and

views humankind as part of a global ecosystem, and subject to ecological laws. These, and the demands of an ecologically based morality, constrain human action, particularly through imposing limits to economic and population growth. There is also a strong sense of respect for nature in its own right, as well as for pragmatic 'systems' reasons.¹⁹

Humanity and all other parts of nature are seen as equally important. Since human beings have developed in a way that allows them to deploy methods of production with global consequences, they have a unique responsibility not to exceed the ecospheric limits of the planet. The recognition of the dialectical relationship between human action and non-human processes leads to ecologically informed self-interest as an ideological basis for human production. Ecocentrism further highlights how certain ecological problems caused by human beings also impact human well-being. Issues of ecological justice are therefore intertwined with issues of social justice.²⁰ Ecocentric approaches focus on wildlife laws that seek to balance conflicting human and wildlife interests.²¹

14 Halsey and White (n 8) 352.

15 Nurse (n 3) 18.

16 Halsey and White (n 8) 352 – 355.

17 Bill Deval and George Sessions, *Deep Ecology* (1985) 131 – 159.

18 Wyatt (n 4) 63.

19 David Pepper, *Eco Socialism: From Deep Ecology to Social Justice* (1993) 33.

20 Halsey and White (n 8) 355 – 356.

21 Nurse (n 3) 18.

2. The harm principle and ‘Rechtsgutstheorie’

Anthropocentric, biocentric, and ecocentric approaches provide alternate bases for the notion of harm and the conception of (criminal) justice. In Anglo-American legal systems particularly, classic anthropocentric notions of criminal justice follow the ‘harm principle’ to define and restrict the legitimate scope of criminal laws.²² Its liberal pioneer John Stuart Mill argues ‘[t]hat the only purpose for which power can be rightfully exercised over any member of a civilised community, against his will, is to prevent harm to others. [...] The only part of the conduct of anyone, for which he is amenable to society, is that which he concerns others.’²³ This view allows only for the victimisation of human beings, while animals and other wildlife are not considered. Joel Feinberg, who further developed the Millian view, states that harm ‘refers to those states of set-back interests that are the consequences of wrongful acts or omissions by others’.²⁴ He differentiates between welfare and ulterior interests. The former relate to a person’s basic interests, ‘whose maintenance at a minimal level is a necessary condition for the advancement of any other interest at all’. The latter describe interests linked to one’s personal projects and goals.²⁵ While Feinberg proposes a more nuanced viewpoint, his approach still primarily focuses on harm inflicted upon human beings. Anthropocentric perspectives generally consider wildlife crimes to be ‘victimless’ crimes, which in turn dominates the way in which policy and policing discourse is approached.²⁶

Legal systems in German-speaking countries justify the criminalisation of conduct when ‘legally protected interests’ are unjustly violated or compromised. The so-called ‘*Rechtsgutstheorie*’ was developed by Johann

22 Andrew von Hirsch, ‘Der Rechtsgutbegriff und das “Harm Principle”’, in Roland Heffendehl, Andrew von Hirsch, and Wolfgang Wohlers (eds), *Die Rechtsgutstheorie – Legitimationsbasis des Strafrechts oder dogmatisches Glasperlenspiel* (2003) 13, 14.

23 John Stuart Mill, *On Liberty* (2001; originally published 1859) 13.

24 Joel Feinberg, *The Moral Limits of the Criminal Law, Volume 1: Harm to Others* (Oxford University Press, 1984) 215.

25 Ibid 112.

26 Nurse (n 3) 18.

Birnbaum.²⁷ The theory focuses on conditions and matters that are valued, including legitimate individual or public interests, as well as entities worth protecting. The range of legally protected interests is defined and legitimised by ethical concepts and the moral consensus of a society.²⁸ Acts or omissions that harm or endanger legally protected interests are sanctioned by criminal law.²⁹ The common denominator between the harm principle and legally protected interests can be constructed as follows: both theories build upon the damage to a resource a person is entitled to.³⁰

3. Implications for wildlife trafficking

3.1. Consequences for human beings

Wildlife trafficking victimises human beings primarily through the indirect negative effects it has on the environment and the economy. It disrupts the environment in a variety of ways. Biodiversity is lost both among animal and non-animal species, either through direct extinction, habitat destruction or limiting access to food sources. From an anthropocentric point of view, loss of biodiversity in plants can affect human survival in terms of food supply, air quality and soil erosion. Facilitated by the vacuum left by the species lost, invasive species spread more easily and further destroy the already weakened ecosystem. Trafficked non-native species released into a new environment may also cause great damage.³¹ Contact between animals from different parts of the world can lead to the transmission and spreading of diseases that were once isolated to certain

27 Johann Birnbaum, 'Über das Erfordernis einer Rechtsverletzung im Begriffe des Verbrechens mit besonderer Rücksicht auf den Begriff der Ehrenkränkung' [1834] *Archiv des Criminalrechts* 149 – 194.

28 Wolfgang Frisch, 'Rechtsgut, Recht, Deliktstruktur und Zurechnung im Rahmen der Legitimation staatlichen Strafens', in Roland Hefendehl, Andrew von Hirsch and Wolfgang Wohlers (eds), *Die Rechtsgutstheorie – Legitimationsbasis des Strafrechts oder dogmatisches Glasperlenspiel* (2003) 215, 216.

29 Günter Stratenwerth, *Schweizerisches Strafrecht, Allgemeiner Teil I: Die Straftat* (4th ed, 2011) 67.

30 Von Hirsch (n 22) 17.

31 Wyatt (n 4) 39 – 42.

species.³² These impacts have the potential to negatively affect the economy. If the natural resources a society relies upon are threatened by the loss of biodiversity, invasive species, or the spread of novel diseases, there are significant negative consequences for government tax revenues, the viability of eco-tourism, business profits and personal livelihoods, among other things.³³ A myriad of industries depend on a healthy environment. According to a 2007 UNEP report, half of the worlds' jobs are linked to agriculture, fishery, and forestry, all of which are heavily influenced by ecosystem stability.³⁴ Governments also lose taxes and customs duties if a species is trafficked through illegal channels instead of being traded on an existing legal market, as in the case of the illicit timber trade. Human beings ultimately pay the price of economic damage to government, business and industry. Human livelihoods may be endangered by the threat that environmental damage caused by wildlife trafficking poses to their jobs or by the overall weakening of the economy they are a part of. Not to be forgotten are rural villagers and other populations that are directly living off their land. Their survival depends on the integrity of an ecosystem that may find itself threatened by deforestation, diversity loss or disease.³⁵

Human beings can also find themselves directly harmed by wildlife trafficking. Due to its highly profitable nature and low risk of detection, wildlife trafficking has drawn the participation of sophisticated organised criminal groups. Violence incited by power dynamics between such groups, and the struggle for control in the illegal wildlife trade, creates physical danger to human life. The transmission of zoonotic diseases through unchecked wildlife trade may also menace individual human health.³⁶

3.2. Consequences for animals

The moral postulate of cross-species humanity, whereby the interests and needs of animals should be valued, has led to the universal recognition of

³² Ibid 44.

³³ Ibid 44 – 45.

³⁴ UNEP, *Global Environment Outlook GEO4: environment for development* (2007) 4, 17.

³⁵ Wyatt (n 4) 44 – 51.

³⁶ Ibid 46 – 53.

ethical animal protection.³⁷ The most important underlying premise is that animals primarily exist for their own sake and not solely for human interests.³⁸ Animal welfare laws enjoy widespread acceptance. Their doctrinal basis is found in the protection of the dignity of animals as a legally protected good. While this does not include an overall protection of animal life, the handling of animals should always occur in accordance with their well-being and intentional killings should inflict the least suffering possible.³⁹ Wildlife trafficking often incentivises the undignified treatment of animals. The methods of removing animals from their natural habitats, or the conditions in which they may be held in captivity and farmed, are often cruel. Many animals are killed in the process of harvesting or manufacturing the desired product. In cases where only a certain part of the animal is desired, the animal is often severely injured and subsequently left to a painful death. If not immediately killed, animals are covertly smuggled. Given the clandestine nature of the operations, the possibility for hazardous and harmful conditions is high. Even if animals are supposedly being transported legally with fraudulent documents, they are very likely to experience horrendous conditions given the highly profit-oriented nature of wildlife trafficking.⁴⁰ Animal cruelty laws already provide a precedent for expanding the traditional approach to harm to include more biocentric and ecocentric notions and recognising the intrinsic value of animal victims. There is no reason not to consider the same for wildlife trafficking. Those within the trafficking chain resorting to condemned methods in their treatment of animals are usually already covered by the scope of animal welfare laws. Criminally penalising the trafficking of animals as a whole on the basis of protecting the dignity of animals allows for the criminal prosecution of those links in the trafficking chain not directly inflicting but ultimately responsible for their mistreatment.

37 Gieri Bolliger et al, *Schweizer Tierschutzstrafrecht in Theorie und Praxis* (2nd ed, 2019) 30 – 31.

38 Gieri Bolliger, *Animal Dignity Protection in Swiss Law – Status Quo and Future Perspectives* (2016) 106.

39 Bolliger et al (n 37) 52 – 67.

40 Wyatt (n 4) 67 – 70.

3.3. A green criminology response

Expanded notions of harm set green criminology apart from mainstream and conventional criminology. Environmental victimisation, viewed through the lens of environmental justice, ecological justice and species justice, includes not only transgressions against human beings and animals, but increasingly plants and specific biospheres or environments.⁴¹ The ecological justice and green justice perspectives of green criminology advocate for justice systems that go beyond anthropocentric concepts and provide protection for nature in its entirety. Green criminology refers to the study by criminologists of environmental harms, environmental laws and environmental regulation with a key focus on environmental crime.⁴² It incorporates an environmental frame of reference to the traditional criminological approach, moving away from the narrow definition of criminal harms as harms caused by humans primarily against humans.⁴³ Environmental victimisation as a more ecocentric approach should, according to Matthew Hall, include 'those harmed by the adverse effects of environmental degradation perpetrated or brought about by individuals, corporations and states'.⁴⁴ Angus Nurse concludes that, therefore, 'punishment becomes justified for those who harm wildlife, a form of environmental degradation given that wildlife is integral to biodiversity and its removal or killing forms part of environmental harm'.⁴⁵

Typical anthropocentric notions construct a hierarchy of victimhood. They create a scale indicating the worthiness of protection of those harmed by a (wildlife) crime. Human beings are on top of the list, followed by the state, animals, plants and then the environment. For reasons of practicability, a prioritisation of victims when it comes to urgency of

41 Tanya Wyatt, Diane Solomon Westerhuis, and Rece Walters, 'Introduction' in Rece Walters, Diane Solomon Westerhuis, and Tanya Wyatt (eds), *Emerging Issues in Green Criminology: Exploring Power, Justice and Harm* (2013) 1, 4.

42 Rob White, 'The Conceptual Contours of Green Criminology' in Rece Walters, Diane Solomon Westerhuis, and Tanya Wyatt (eds), *Emerging Issues in Green Criminology: Exploring Power, Justice and Harm* (2013) 17, 19.

43 Nurse (n 3) 2 – 3.

44 Matthew Hall, 'Victims of Environmental Harm and Their Role in National and International Justice' in Rece Walters, Diane Solomon Westerhuis, and Tanya Wyatt (eds), *Emerging Issues in Green Criminology: Exploring Power, Justice and Harm* (2013) 216, 221.

45 Nurse (n 3) 87.

protection is often inevitable. However, given the power dynamics between human beings and the environment that have developed through modern means of production and the increasingly enormous potential of human destruction through technological advances, there is a moral obligation to expand the notion of what is considered harmful behaviour that is worth criminalising. Mill's principle provides a solid base, though adhering to his strictly anthropocentric approach is arguably outdated. Extending recognisable harm to include ecocentric and biocentric concepts justifies the use of criminal law to prioritise and combat forms of wildlife trafficking that at first glance cause no obvious harm to human beings. Law represents a societal moral compass. Hence, if it is accepted that environmental health is increasingly gaining weight as a global issue, a broader victimology of wildlife trafficking that includes anthropocentric, biocentric and ecocentric notions of harm should be explored. As has been demonstrated, the necessary theoretical basis for the criminalisation of wildlife trafficking can be established, be it under the premise of the harm principle or based on the *'Rechtsgutstheorie'*.

III. Effective implementation

1. Types of offences

Criminal offences designed to combat wildlife trafficking cover a wide range of conduct, circumstances and stages involved in the phenomenon. Some offences only apply to conduct that occurs inside a jurisdiction, while others cover cross-border activities.⁴⁶ While specific offences vary greatly between jurisdictions for several reasons, including differing realities in the illicit wildlife trade, the following remarks seek to capture the types of offences that are most commonly encountered in national laws, spanning from sourcing wildlife through to trade, sale, and consumption of plants and animals and related products. Rather than advocate for one, all-encompassing wildlife trafficking offence, this chapter highlights the different forms of conduct that may be criminalised.

⁴⁶ UNODC (n 4) 34.

Wildlife is usually poached, illegally logged or harvested. Poaching offences refer to the unlawful taking of wild animals.⁴⁷ This conduct may involve the killing or trapping of an animal, hunting in a protected area, or hunting without a hunting licence. In some jurisdictions, this also includes hunting above allocated quotas or the use of prohibited hunting methods or instruments.⁴⁸ Illegal logging and illegal harvesting captures a wide range of criminal activities associated with the felling of trees and the taking of plants. It may involve logging or taking of protected species, logging in protected areas, excessive logging, logging without permits or licences, the use of fraudulent permits, obtaining logging permits illegally, non-payment of taxes and other forest fees, and damaging forest or plant ecosystems.⁴⁹

Subsequent activities generally centre around the illegal processing of wildlife. This includes the milling of timber, the slaughtering of animals, and the manufacturing of products from animals or plants that have been obtained illegally. Processing may, in some cases, involve activities that serve to disguise the origin of the animal or plant, or conceal the species involved. The lack of a legally obtained, corresponding license may also lead to the illegality of processing activities.⁵⁰

Trafficking, sale and supply generally follow processing activities and cover a range of commercial acts involving animal or plant products.⁵¹ ‘Trafficking’, in relation to a specimen, refers to illegal acts by a person for their own benefit or that of someone else that may involve dispatching, transporting, distributing, brokering, offering, keeping for offer, dealing, processing, purchasing, selling, supplying, or storing.⁵² These acts may occur absent legally obtained licences or other required documentation.

While also falling into the broader trafficking category, offences relating to export and import of wild flora and fauna specifically refer to illegal

47 Olga Biegus and Christian Bueger, ‘Poachers and pirates. Improving coordination of the global response to wildlife crime’ (2017) 60 *South African Crime Quarterly* 29, 30; UNODC (n 4) 39; Wyatt (n 4) 3.

48 UNODC (n 4) 39; UNODC, *Guide on Drafting Legislation to Combat Wildlife Crime* (September 2018) 19 – 20.

49 UNODC (n 4) 36 – 38.

50 Ibid 40.

51 Ibid 41; UNODC (n 48) 26 – 27; Wyatt (n 4) 2 – 5.

52 UNODC (n 51) 13.

activities across international borders. They include, inter alia, export/import without authorisation, proper documentation or with fraudulent documents, export/import of illegally obtained wildlife and forest products, export/import of protected species, false classification and labelling of exports and imports, as well as export and imports with illegally obtained documents.⁵³ Export and import above set quotas or against export/import bans are also targeted. Many national offences in the import/export category reflect the obligation arising from *CITES* to prohibit and penalise the trade in and possession of endangered species in violation of the treaty.⁵⁴

Offences may also be legislated to criminalise the illegal acquisition, possession and consumption of trafficked animals and plants (and products). They are aimed at criminalising demand, the main driver of wildlife trafficking. Notably, many jurisdictions have chosen not to create such offences due to hesitancy in criminalising and punishing consumers (regardless of whether they wittingly or unwittingly acquire a protected species or other animal or plant contraband). Although Article VIII(1) of *CITES* makes express reference to penalising the possession of *CITES*-protected species that are traded illegally, very few jurisdictions have criminalised, for instance, the purchase or possession of animals, plants, or products derived from an illegal source or a protected species.⁵⁵

The categories of offences discussed here are not exhaustive and some jurisdictions set out additional offences for particular activities or in relation to particular species, methods, results, or locations involved. Differences between offences found in national laws not only relate to the types of conduct, species, methods, et cetera that are criminalised, but also whether a mental element (*mens rea*) is required and what this element may be. Most jurisdictions require proof of purpose (direct intent) or knowledge as an element of their most serious offences. Apart from that, there is very little unanimity between jurisdictions in the criminalisation of other, less onerous states of minds such as recklessness and negligence. Offences may also differ in terms of the required physical elements (*actus reus*). For example, a particular action may be criminalised, or a specific

53 UNODC (n 4) 41–42.

54 Art VIII *CITES*; see further, Jacqueline L Schneider, *Sold into Extinction: The Global Trade in Endangered Species* (2012) 35; UNODC (n 4) 42.

55 UNODC (n 4) 43–44; EIA, *Time for Action: End the criminality and corruption fuelling wildlife crime* (November 2016) 6; UNODC (n 48) 24–25.

result that either endangers or harms wildlife. There are also significant variations between jurisdictions regarding extensions of criminal liability for offences in relation to attempts, participation, incitement and the like.⁵⁶ Some jurisdictions have also enacted specific defences that only apply in relation to wildlife and forest offences.⁵⁷

2. Penalties and sentencing

As with the offences, the types and severity of statutory penalties for wildlife trafficking differ considerably between jurisdictions. While some countries limit penalties to small fines, others provide for long terms of imprisonment. Although quite exceptional—and questionable in light of international human rights obligations—some jurisdictions use penalties involving corporal or capital punishment for serious offences pertaining to wildlife trafficking.⁵⁸ Within any one jurisdiction, statutory penalties for wildlife and forest offences vary depending on the type of conduct, the level of harm caused or damage done, the methods used, and type of species involved. Higher penalties generally apply to offences that involve more serious consequences or dangers. In some places, higher penalties are assigned to offences involving particularly endangered (or particularly charismatic) species.⁵⁹

Statutory provisions usually provide for a range of penalties within which sentences may be set. National penalties and sentencing laws or codes of criminal procedure commonly spell out a range of aggravating and mitigating factors that determine the sentence imposed in individual cases. The respective factors and their use vary between jurisdictions, legal systems and traditions.⁶⁰ Aggravating factors in relation to wildlife trafficking may include the gravity of the damage caused, the use of particularly cruel methods towards animals, the number or quantity of

⁵⁶ See Nurse (n 3) 24; UNODC (n 48) 17; UNODC (n 4) 32–34.

⁵⁷ UNODC (n 48) 33.

⁵⁸ UNODC (n 4) 44; see also Cyrille de Klemm, *Guidelines for Legislation to Implement CITES*, IUCN Environmental Policy and Law Paper No 26 (1993) 65–65; Nurse (n 3) 71; WWF, *Tightening the Net: Toward a Global Legal Framework on Transnational Organized Environmental Crime* (2015) 36–38.

⁵⁹ UNODC (n 4) 44.

⁶⁰ UNODC (n 48) 36.

specimens or items involved, whether any animal involved in the offence was pregnant, incubating or caring for dependent offspring at the time of the offence, previous wildlife offences committed, the size of any financial or other material benefit, or the leadership or managerial role of the offender in an organised criminal group. Mitigating factors may include having had a lower or minor role in the offending, having no prior criminal record, showing remorse for the offence, or voluntary cooperation with law enforcement officials to investigate and prosecute other wildlife crime.⁶¹

Research into sentencing for offences related to wildlife trafficking tends to show that most defendants are punished with (small) fines. The fines are sometimes lower than the value of the commodity the defendant smuggled, sold, or acquired. Imprisonment generally appears rare in wildlife trafficking cases and several sources have pointed out that in this area of the law 'the punishment does not adequately fit the crime'.⁶² Discrepancies between penalties provided by the law and adjudicated sentences for wildlife and forest offences in different jurisdictions can create obstacles for international cooperation.

Variation among countries regarding the penalties imposed for wildlife trafficking offences can impede cooperation efforts to combat wildlife and forest crime. Accordingly, UNODC has expressed a desire to achieve a certain degree of harmony between penalties in different jurisdictions.⁶³ This does not necessarily entail the toughening of sanctions; severe penalties should be reserved for serious offences that are committed intentionally, for second or multiple offences, and for offences that cause harm or death to another person.⁶⁴ The level of punishment available for offences also has significant consequences under the *United Nations*

⁶¹ Ibid 37.

⁶² Nurse (n 3) 150 – 151; Wyatt (n 4) 103; see also Erika Alacs and Arthur Georges, 'Wildlife across our borders: a review of the illegal trade in Australia' (2008) 40(2) *Australian Journal of Forensic Sciences* 147, 154 – 155; European Parliament, Directorate-General for Internal Policies, *Wildlife Crime* (March 2016) 73 – 84; Victoria May et al., *A Review of Wildlife Crime Court Cases in Malawi, 2010 – 2017* (November 2017) 11; Rebekka Runhovde, 'Taking the Path of Least Resistance? Decision-Making in Police Investigations of Illegal Wildlife Trade' (2016) 11(1) *Policing* 87, 98.

⁶³ UNODC (n 4) 45.

⁶⁴ Ibid.

Convention against Transnational Organised Crime (UNTOC).⁶⁵ The Convention only applies to offences set out in its provisions (corruption,⁶⁶ money-laundering,⁶⁷ obstruction of justice,⁶⁸ and participation in an organised criminal group),⁶⁹ offences in Protocols to the Convention (covering trafficking in persons,⁷⁰ smuggling of migrants,⁷¹ and illegal manufacture and trafficking in firearms),⁷² and 'serious crimes'. According to Article 2(a) of *UNTOC*, an organised criminal group acts in concert with the aim of committing one or more serious crimes. Article 2(b) defines a 'serious crime' as an offence punishable by a maximum deprivation of liberty of at least four years. Domestic offences with lesser penalties are not covered by the Convention. For example, Article 26 of the *Swiss Federal Law on the Commerce of Protected Species*⁷³ states a maximum threat of punishment of three years deprivation of liberty. As a result, violations of this offence are not treated as 'serious crimes' for the purposes of *UNTOC*. Furthermore, Article 260^{ter} of the *Swiss Criminal Code*⁷⁴ criminalises the participation in an organised criminal groups that commits offences punishable by a minimum deprivation of liberty of more than three years. Hence under Swiss criminal law, groups that commit wildlife trafficking offences cannot be treated as organised crime. Neither are provision under *UNTOC* applicable. Even though colloquially such syndicates may be referred to as organised criminal groups, States Parties can only apply its measures if their threat of punishment of wildlife trafficking offences meets the mandatory threshold. In this context, several scholars and organisations argue in favour of the handling of severe

65 Opened for signature 15 December 2000, 2225 UNTS 209 (entered into force 29 September 2003).

66 *UNTOC* art 8.

67 *UNTOC* art 6.

68 *UNTOC* art 23.

69 *UNTOC* art 5.

70 *Protocol to Prevent, Suppress and Punish Trafficking in Persons, especially Women and Children*, opened for signature 12 December 2000, 2237 UNTS 319 (entered into force 25 December 2003).

71 *Protocol against the Smuggling of Migrants by Land, Sea, and Air*, opened for signature 12 December 2000, 2241 UNTS 507 (entered into force 28 January 2004).

72 *Protocol against the Illicit Manufacturing of and Trafficking in Firearms, Their Parts and Components and Ammunition*, opened for signature 31 May 2001, 2326 UNTS 208 (entered into force 3 July 2005).

73 SR 453.

74 SR 331.0.

wildlife and forest offences as ‘serious crimes’ according to *UNTOC*, punishable with imprisonment of at least four years.⁷⁵ The example further shows that not only the legislation of the offences but also the appointment of the respective statutory penalties require a coherent approach. The Swiss legislator has recognised this issue and has vowed to intensify the sanctions that apply to wildlife trafficking.⁷⁶

3. Related offences

In addition to offences specifically associated with wildlife trafficking and other forms of wildlife crime, other, more general offences under environmental laws, animal protection laws, or under the general criminal law can play an important role in the suppression of wildlife trafficking. If there is evidence that a wildlife trafficking offence and a related offence have been committed, both should be punished.

Animal cruelty offences, as found in many jurisdictions, can serve to punish the way in which living animals are captured, transported, traded, poached, or slaughtered.⁷⁷

Fraudulent documents are frequently produced or genuine documents altered to disguise the authenticity, illegality, quantity, volume, origin, or destination of wildlife and wildlife products. This can involve the removal, alteration, defacing, or erasure of customs stamps or labels, or of marks affixed to animals, plants and parts thereof.⁷⁸ Some jurisdictions have

75 EIA (n 55) 6; Lydia Slobodian, *Addressing Transnational Wildlife Crime through a Protocol to the UN Convention against Transnational Organized Crime: A Scoping Paper*, IUCN Environmental Law Centre (13 October 2014) 28; UNODC (n 48) 34; UN, General Assembly resolution 69/314, Tackling illicit trafficking in wildlife, A/RES/69/314 (30 July 2015), Mara E Zimmerman, ‘The Black Market for Wildlife: Combating Transnational Organized Crime in the Illegal Wildlife Trade’ (2003) 36 *Vanderbilt Journal of Transnational Law* 1657, 1684; see also Hennie Strydom, ‘Transnational Organised Crime and the Illegal Trade in Endangered Species of Wild Fauna and Flora’ in Pierre Hauck and Sven Peterke (eds), *International Law and Transnational Organised Crime* (2016) 264, 277 – 278.

76 Swiss Confederation, Federal Department of Home Affairs, *Amendment to the Swiss Federal Law on the Commerce of Protected Species* (2019) 5.

77 Global Animal Law Project, ‘Animal Legislations in the World at National Level’ (Web page, undated).

78 UNODC (n 48) 23 – 24; UNODC (n 4) 46.

specific offences for the use of fraudulent documents in the context of wildlife trafficking. Offences for obtaining or issuing fraudulent licences or obtaining licences or other permits by way of corruption are also included.⁷⁹ In the absence of specific offences, general offences relating to document fraud, bribery, and abuse of office can also apply in cases involving wildlife trafficking.⁸⁰

In many places, corruption is one of the main enablers and facilitators of wildlife trafficking. This involves the whole spectrum from petty corruption of low-ranking officers to grand corruption of senior government representatives. Corruption frequently occurs in the process of applying for licences, permits, or other documents, as well as at border controls or other inspection points where officials may be bribed. In the wildlife, forestry and fisheries sectors, corruption also involves bribery of government officials or politicians for preferential treatment and extortion by and of officials to sign off on illegal operations and official decisions that favour certain groups.⁸¹ Most of these activities, both active and passive bribery, are criminalised under national laws; some jurisdictions have specific offences for corruption and bribery in the wildlife, forestry, and fisheries sectors. This can also extend to corruption in the private sector.

Wildlife trafficking is often driven by greed and the desire to obtain financial or other material benefits. For this reason, a further important tool to criminalise and fight wildlife trafficking are offences relating to the laundering of proceeds of such crime and to the financing of wildlife trafficking.⁸² Today, nearly every jurisdiction worldwide has offences relating to money laundering that enable the confiscation and seizure of proceeds of crime. In some jurisdictions, special offences for money laundering and financial crime in the wildlife, forestry, and fisheries sector have been enacted.

79 For further suggestions see UNODC (n 48) 24.

80 See de Klemm (n 58) 63.

81 Biegus and Bueger (n 47) 34–35; INTERPOL and UNEP, *Strategic Report: Environment, Peace and Security, A Convergence of Threats* (December 2016) 56; UNODC (n 4) 53–54; see also Ranee Khooshie Lal Panjabi, 'For Trinkets, Tonics, and Terrorism: International Wildlife Poaching in the Twenty-First Century' (2014) 43 *Georgia Journal of International and Comparative Law* 1, 13.

82 IFAW, *Criminal Nature: The global security implications of the illegal wildlife trade* (June 2013) 15; Panjabi (n 80) 13; UNODC (n 48) 32–33; UNODC (n 4) 48.

Some instances of wildlife trafficking are committed by or associated with organised criminal groups.⁸³ The prosecution of members of such groups and of the directors and ‘masterminds’ has historically been quite difficult and few jurisdictions had offences for persons who are not themselves physically involved (and caught) in the commission of the crime. Following the entry into force of *UNTOC*, more and more jurisdictions have enacted specific offences criminalising participation in an organised criminal group as stipulated by Article 5 of the Convention. Such offences can be important tools to target offenders who lead, direct, finance or help in other capacities criminal organisations involved in wildlife trafficking.⁸⁴ However, in order to do so, the wildlife trafficking offences must meet the threshold level of punishment necessary for *UNTOC* to apply, as elaborated before.

Last but not least, wildlife traffickers sometimes use violence, threats, or even murder to facilitate their actions.⁸⁵ In such cases, criminal offences such as homicide, assault, coercion, or the making of threats may apply.

4. Enforcement challenges

A myriad of challenges and obstacles impede the effective enforcement of wildlife and forest offences. Furthermore, combating wildlife trafficking is currently not a priority in many countries.⁸⁶ Policy makers, police,

⁸³ See further Chapter One of this volume.

⁸⁴ UNODC (n 4) 59; see also UNODC (n 48) 29 – 30; Slobodian (n 75) 12 – 15; WWF (n 58) 30; UN, Conference of the Parties to the United Nations Convention against Transnational Organized Crime, *Implementation of the United Nations Convention against Transnational Organized Crime: consolidated information received from States for the first reporting cycle, Report of the Secretariat*, UN Doc CTOC/COP.2005/2/Rev.2 (25 August 2008) 4 – 5.

⁸⁵ Daniela Kleinschmit et al (eds), *Illegal Logging and Related Timber Trade – Dimensions, Drivers, Impacts and Responses*, IUFRO World Series Volume 35 (2016) 83 – 86; C Nellemann and INTERPROL (eds), *Green Carbon, Black Trade: Illegal Logging, Tax Fraud and Laundering the World's Tropical Forests*, A UNEP Rapid Response Assessment (2012) 7, 14.

⁸⁶ Elizabeth L Bennett, ‘Another inconvenient truth: the failure of enforcement systems to save charismatic species’ (2011) 45(4) *Fauna & Flora International* 476, 477; DLA Piper, *Empty Threat 2015: Does The Law Combat Illegal Wildlife Trade? A Review of Legislative and Judicial Approaches in Fifteen Jurisdictions* (May 2015) 4; Nurse (n 3) 113; Angus Nurse, ‘Privatising the green police: the role of NGOs in wildlife law enforcement’ (2013) 59 *Crime, Law and Social Change* 305, 305; UNODC (n 4) 3; Wyatt (n 4) 108; Melanie

prosecutors, and the judiciary often do not consider wildlife and forest offences as serious offences warranting special consideration and prioritisation.⁸⁷ This is not limited to developing countries but has also been reported in countries such as Norway⁸⁸ and the United Kingdom.⁸⁹ While in some places there are some signs that the 'status' of wildlife trafficking is rising, many countries still afford negligible attention to these crimes.⁹⁰

In many jurisdictions, laws and regulations pertaining to wildlife trafficking and to other aspects of the wildlife and forest sector remain poorly developed and frequently suffer from significant gaps. Elements of criminal offences may lack clear articulation and definition. This often hinders effective investigation and prosecution. In some jurisdictions, relevant offences, if they do exist, are poorly drafted, leaving ambiguities and uncertainties that can obstruct prosecutions and be exploited by defendants.⁹¹ Where state officials are involved in wildlife trafficking, diplomatic immunity can hinder their prosecution and conviction. Furthermore, in some jurisdictions, authorities and officers responsible for enforcing wildlife trafficking offences lack the necessary investigative and coercive powers.

Enforcement of offences relating to wildlife trafficking is often hampered by inadequate resourcing and training.⁹² In many countries, this relates to budget appropriation rather than to a lack of resources. General law enforcement authorities often have little experience and competence in dealing with wildlife trafficking.⁹³ Specialised agencies may be understaffed, poorly trained, and under-funded. Poor prosecutorial and judicial practices hinder a proper response to wildlife trafficking.⁹⁴ This often leads to environments in which poachers, smugglers and others involved in

Wellsmith, 'Wildlife Crime: The Problems of Enforcement' (2011) 17 *European Journal on Criminal Policy Research* 125, 134; WWF (n 58) 34.

87 Anita Sundari Akella and Crawford Allan, *Dismantling Wildlife Crime: Executive Summary* (November 2012) 8; Wellsmith (n 86) 137.

88 Runhovde (n 62) 98.

89 Wellsmith (n 86) 137–138.

90 INTERPOL and UNEP (n 81) 21–25.

91 UNODC (n 4) 23; Biegus and Bueger (n 47) 30; Nurse (n 3) 113.

92 Bennett (n 86) 477; Nurse (n 3) 113–114; see also Akella & Allan (n 87) 8.

93 See Runhovde (n 62) 89.

94 UNODC (n 4) 118, 125.

wildlife trafficking can operate with relative impunity.⁹⁵ A lack of integrity of involved authorities and officials enables corruption and further exacerbates this problem. National coordination and international cooperation are crucial in combating wildlife trafficking. Individual officials and enforcement agencies unable or unwilling to coordinate impede the sharing of relevant information, available resources and know-how.⁹⁶

Since there is no uniform international environmental criminal law, the enforcement of wildlife and forest crimes remains largely in the hands of state agencies and is subject to state sovereignty.⁹⁷ As a result, the criminal justice response to wildlife and forest crime usually involves various government sectors and agencies. Often several institutions are involved and have to work together. Hence, it is important to know 'who is who' and 'who does what'.⁹⁸ Several countries divide the responsibilities for investigating wildlife and forest offences between multiple agencies according to the stage of the investigation or the kind or the seriousness of the offences that appear to be involved.⁹⁹ Furthermore, the investigation of wildlife and forest crime is not limited to law enforcement agencies. It frequently involves a great variety of government departments, as well as actors from the private sector and civil society.¹⁰⁰ The success of law enforcement depends heavily on close collaboration between key stakeholders.¹⁰¹ It is, therefore, crucial that the different actors involved in a state's effort to combat wildlife trafficking know the relevant legislation and enforce it in a coordinated and consistent manner.

95 Biegus and Bueger (n 47) 34.

96 Akella & Allan (n 87) 10; see also EIA (n 55) 11.

97 Nurse (n 3) 56.

98 UNODC (n 4) 67–68; UNODC (n 48) 43; see also INTERPOL, *Global Wildlife Enforcement: Strengthening Law Enforcement Cooperation Against Wildlife Crime* (2018) 12.

99 UNODC (n 48) 44.

100 Nurse (n 3) 7; Nurse (n 86) 306; DLA Piper (n 86) 4; UNODC (n 4) 73.

101 UNODC (n 4) 73; Kevin Tomkins, 'Police, Law Enforcement and the Environment' (2005) 16(3) *Current Issues in Criminal Justice* 295, 301–304.

IV. Conclusion

This chapter has shown that the criminalisation of wildlife trafficking is not merely a means to an end, but can and should have a principled foundation. The harm principle and the *‘Rechtsgutstheorie’* provide a basis for wildlife trafficking offences. These offences must be effectively articulated and enforced, cognisant of the actualities of wildlife trafficking in different jurisdictions. Some countries typically serve as the origin of trafficked wildlife, while others serve as processing, transit or destination countries. National laws should reflect that. The power of judicial measures enabled by the use of criminal law should not be underestimated. They equip a state’s executive with effective and swift tools for the detection and investigation of wildlife trafficking. The more serious the offence, the more judicial measures are usually permitted by a state’s criminal procedure laws.

Finally, criminalisation should not be regarded as the only solution to wildlife trafficking. While the use of criminal law is an important aspect of a holistic approach to the phenomenon, it should ideally be employed in combination with other approaches and strategies. Other areas of law and policy, including economic development, animal welfare rules, and customs regulations to name a few, all have a role to play.

Bibliography

- Akella, Anita Sundari and Crawford Allan, *Dismantling Wildlife Crime: Executive Summary* (November 2012) <https://www.traffic.org/site/assets/files/7385/dismantling-wildlife-crime_2.pdf>
- Alacs, Erika and Arthur Georges, ‘Wildlife across our borders: a review of the illegal trade in Australia’ (2008) 40(2) *Australian Journal of Forensic Sciences* 147
- Bennett, Elizabeth L, ‘Another inconvenient truth: the failure of enforcement systems to save charismatic species’ (2011) 45(4) *Fauna & Flora International* 476
- Biegus, Olga and Christian Bueger, ‘Poachers and pirates. Improving coordination of the global response to wildlife crime’ (2017) 60 *South African Crime Quarterly* 29
- Birnbaum, Johann, ‘Über das Erfordernis einer Rechtsverletzung im Begriffe des Verbrechens mit besonderer Rücksicht auf den Begriff der Ehrenkränkung’ (1834) *Archiv des Criminalrechts* 149

- Bolliger, Gieri, *Animal Dignity Protection in Swiss Law – Status Quo and Future Perspectives*, Zurich: Schulthess, 2016
- Bolliger, Gieri et al, *Schweizer Tierschutzstrafrecht in Theorie und Praxis*, Zurich: Schulthess, 2nd ed, 2019
- de Klemm, Cyrille, *Guidelines for Legislation to Implement CITES*, IUCN Environmental Policy and Law Paper No 26, Gland and Cambridge: IUCN, 1993
- Deval, Bill and George Sessions, *Deep Ecology*, Layton, UT: Gibbs Smith, 1985
- DLA Piper, *Empty Threat 2015: Does The Law Combat Illegal Wildlife Trade? A Review of Legislative and Judicial Approaches in Fifteen Jurisdictions*, London: DLA Piper, May 2015
- Eckersley, Robyn, *Environmentalism and Political Theory: Toward an Economic Approach*, Albany, NY: State University of New York Press, 1992
- EIA, *Time for Action: End the criminality and corruption fuelling wildlife crime*, London: EIA, November 2016
- European Parliament, Directorate-General for Internal Policies, *Wildlife Crime*, Study for the ENVI Committee, Brussels: European Union, March 2016
- Feinberg, Joel, *The Moral Limits of the Criminal Law, Volume 1: Harm to Others*, Oxford: Oxford University Press, 1984
- Frisch, Wolfgang, 'Rechtsgut, Recht, Deliktstruktur und Zurechnung im Rahmen der Legitimation staatlichen Strafens', in Roland Hefendehl, Andrew von Hirsch, and Wolfgang Wohlers (eds), *Die Rechtsgutstheorie – Legitimationsbasis des Strafrechts oder dogmatisches Glasperlenspiel*, Baden Baden: Nomos, 2013, 215
- Global Animal Law Project, 'Animal Legislations in the World at National Level' (Web page, undated) <<https://www.globalanimallaw.org/database/national/index.html>>
- Hall, Matthew, 'Victims of Environmental Harm and Their Role in National and International Justice' in Rece Walters, Diane Solomon Westerhuis, and Tanya Wyatt (eds), *Emerging Issues in Green Criminology: Exploring Power, Justice and Harm*, Basingstoke: Palgrave Macmillan, 2013, 216
- Halsey, Mark and Rob White, 'Crime, Ecophilosophy and Environmental Harm' (1998) 2(3) *Theoretical Criminology* 345
- IFAW, *Criminal Nature: The global security implications of the illegal wildlife trade*, Brussels: IFAW, June 2013

- INTERPOL and UNEP, *Strategic Report: Environment, Peace and Security, A Convergence of Threats*, Lyon: International Criminal Police Organisation, December 2016
- INTERPOL, *Global Wildlife Enforcement: Strengthening Law Enforcement Cooperation Against Wildlife Crime*, Lyon: INTERPOL, 2018
- Kleinschmit, Daniela et al (eds), *Illegal Logging and Related Timber Trade – Dimensions, Drivers, Impacts and Responses*, IUFRO World Series Volume 35, Vienna: International Union of Forest Research Organizations, 2016
- May, Victoria et al., *A Review of Wildlife Crime Court Cases in Malawi, 2010 – 2017*, Lilongwe: Department of National Parks and Wildlife of Malawi, November 2017
- Mill, John Stuart, *On Liberty*, Kitchener, ont: Batoche Books, 2001; originally published 1859
- Nellemann, C and INTERPOL (eds), *Green Carbon, Black Trade: Illegal Logging, Tax Fraud and Laundering the World's Tropical Forests*, A UNEP Rapid Response Assessment, Nairobi and Arendal: UNEP and GRID-Arendal 2012
- Nurse, Angus, 'Privatising the green police: the role of NGOs in wildlife law enforcement' (2013) 59 *Crime, Law and Social Change* 305
- Nurse, Angus, *Policing Wildlife: Perspectives on the Enforcement of Wildlife Legislation*, Basingstoke: Palgrave Macmillan, 2015
- Panjabi, Raneen Khooshie Lal 'For Trinkets, Tonics, and Terrorism: International Wildlife Poaching in the Twenty-First Century' (2014) 43 *Georgia Journal of International and Comparative Law* 1
- Pepper, David, *Eco Socialism: From Deep Ecology to Social Justice*, London: Routledge, 1993
- Runhovde, Rebekka, 'Taking the Path of Least Resistance? Decision-Making in Police Investigations of Illegal Wildlife Trade' (2016) 11(1) *Policing* 87
- Schneider, Jacqueline L, *Sold into Extinction: The Global Trade in Endangered Species*, Santa Barbara, CA: Praeger, 2012
- Slobodian, Lydia, *Addressing Transnational Wildlife Crime through a Protocol to the UN Convention against Transnational Organized Crime: A Scoping Paper*, IUCN Environmental Law Centre (13 October 2014) <<http://www2.ecolex.org/server2neu.php/libcat/docs/LI/MON-092691.pdf>>
- Stratenwerth, Günter, *Schweizerisches Strafrecht, Allgemeiner Teil I: Die Straftat*, Bern: Stämpfli, 4th ed, 2011

- Strydom, Hennie, 'Transnational Organised Crime and the Illegal Trade in Endangered Species of Wild Fauna and Flora' in Pierre Hauck and Sven Peterke (eds), *International Law and Transnational Organised Crime*, Oxford: Oxford University Press, 2016, 264
- Swiss Confederation, Federal Department of Home Affairs, *Amendment to the Swiss Federal Law on the Commerce of Protected Species*, Bern, 2019
- Tomkins, Kevin, 'Police, Law Enforcement and the Environment' (2005) 16(3) *Current Issues in Criminal Justice* 295
- UN, Conference of the Parties to the United Nations Convention against Transnational Organized Crime, *Implementation of the United Nations Convention against Transnational Organized Crime: consolidated information received from States for the first reporting cycle, Report of the Secretariat*, UN Doc CTOC/COP.2005/2/Rev.2 (25 August 2008)
- UN, General Assembly resolution 69/314, *Tackling illicit trafficking in wildlife*, UN Doc A/RES/69/314 (30 July 2015)
- UNEP, *Global Environment Outlook GEO4: environment for development*, Valetta: Progress Press, 2007
- UNODC, 'Wildlife and Forest Crime: Overview' (Web page, 2019) <<https://www.unodc.org/unodc/en/wildlife-and-forest-crime/overview.html>>
- UNODC, *Guide on Drafting Legislation to Combat Wildlife Crime*, Vienna: United Nations, September 2018
- UNODC, *Wildlife and Forest Crime Analytic Toolkit*, New York, NY: United Nations, rev ed 2012
- von Hirsch, Andrew, 'Der Rechtsgutbegriff und das "Harm Principle"', in Roland Hefendehl, Andrew von Hirsch, and Wolfgang Wohlers (eds), *Die Rechtsgutstheorie – Legitimationsbasis des Strafrechts oder dogmatisches Glasperlenspiel*, Baden Baden: Nomos, 2003, 13
- Wellsmith, Melanie, 'Wildlife Crime: The Problems of Enforcement' (2011) 17 *European Journal on Criminal Policy Research* 125
- White, Rob 'The Conceptual Contours of Green Criminology' in Rece Walters, Diane Solomon Westerhuis, and Tanya Wyatt (eds), *Emerging Issues in Green Criminology: Exploring Power, Justice and Harm*, Basingstoke: Palgrave Macmillan, 2013, 17
- WWF, *Tightening the Net: Toward a Global Legal Framework on Transnational Organized Environmental Crime*, Geneva: Global Initiative against Transnational Organized Crime, April 2015

Wyatt, Tanya, Diane Solomon Westerhuis, and Rece Walters, 'Introduction', in Rece Walters, Diane Solomon Westerhuis, and Tanya Wyatt (eds), *Emerging Issues in Green Criminology: Exploring Power, Justice and Harm*, Basingstoke: Palgrave Macmillan, 2013, 1

Wyatt, Tanya, *Wildlife Trafficking: A Deconstruction of the Crime, the Victims and the Offenders*, New York, NY; Palgrave Macmillan, 2013

Zimmerman, Mara E, 'The Black Market for Wildlife: Combating Transnational Organized Crime in the Illegal Wildlife Trade' (2003) 36 *Vanderbilt Journal of Transnational Law* 1657

Chapter Ten

Ermittlungsmethoden zum Aufspüren des illegalen Wildtierhandels: Ein Blick in den Werkzeugkoffer

KARINA JASMIN KARIK

Der illegale Wildtierhandel ist oftmals in verschiedene Stufen gegliedert und erfolgt durch mehrere Akteure. Zum Aufspüren des illegalen Wildtierhandels kann eine Vielzahl an Methoden eingesetzt werden. Diese sind das Aufspüren von Wilderei, die Tatortarbeit, die kontrollierte Lieferung, die Überwachung, der Einsatz falscher Identitäten sowie das Durchführen von Grenzkontrollen. Im Kontext des Aufspürens von illegalem Wildtierhandel mangelt es oftmals an Ressourcen sowie an rechtlichen Grundlagen. Diese Problemstellungen erschweren und behindern das Aufspüren des illegalen Wildtierhandels. Das vorliegende Kapitel erörtert die genannten Methoden, sowie die Relevanz von Wissensgenerierung und Wissensmanagement, die zu einer besseren Aufspürungsrate bezüglich des illegalen Wildtierhandels beitragen können.

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I. Einleitung

Der Terminus ‘illegaler Wildtierhandel’ bezeichnet jeglichen gegen nationales oder internationales Recht verstoßenden Handel mit lebenden oder toten Wildtieren und deren Bestandteilen, sowie mit aus Wildtieren gefertigten Produkten.¹ Aus dieser Definition ergibt sich, dass verschiedenartige Normverstöße zur Illegalität von Wildtierhandel führen können.² Eine gängige Variante des illegalen Wildtierhandels ist etwa der Handel mit gewilderten Tieren.³ Ein weiteres Beispiel ist der gegen das *Übereinkommen über den internationalen Handel mit gefährdeten frei lebenden Tieren und Pflanzen*, kurz *CITES*,⁴ verstoßende Wildtierhandel, der das kumulative Vorliegen von Wilderei (hierunter wird das illegale Jagen von Wildtieren verstanden)⁵ im Einzelfall jedoch nicht ausschließt.⁶

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- 1 Anita Lavorgna, ‘Wildlife trafficking in the internet age’ (2014) 3(5) *Crime Science* 1, 1; ähnlich auch IFAW, *Caught in the web: Wildlife trade on the internet* (July 2005) 1; Greg L Warchol, ‘The Transnational Illegal Wildlife Trade’ (2004) 17(1) *Criminal Justice Studies* 57, 59.
 - 2 Siehe hierzu vor allem Jacob Phelps, Duan Biggs und Edward L Webb, ‘Tools and terms for understanding illegal wildlife trade’ (2016) 14(9) *Frontiers in Ecology and the Environment* 479, 480.
 - 3 Timothy C Haas und Sam M Ferreira, ‘Optimal patrol routes: interdicting and pursuing rhino poachers’ (2018) 19(1) *Police Practice and Research* 61, 62.
 - 4 Zur Unterzeichnung aufgelegt 3 März 1973, 993 UNTS 243 (in Kraft getreten 1 July 1975) (*Convention on International Trade in Endangered Species of Wild Flora and Fauna*).
 - 5 Atilla C Ferreguetti et al, ‘One step ahead to predict potential poaching hotspots: Modeling occupancy and detectability of poachers in a neotropical rainforest’ (2018) 227 *Biological Conservation* 133, 133.
 - 6 Lavorgna (n 1) 2.

Der illegale Wildtierhandel ist dadurch charakterisiert, dass er in mehreren aufeinanderfolgenden Stufen stattfindet.⁷ Oft nimmt er seinen Ausgang in der Wilderei.⁸ Der Ort der Wilderei, sowie auch jeder weitere Ort, der Schauplatz einer Stufe des illegalen Wildtierhandels wird (so beispielsweise der Verkaufsort)⁹, kann möglicherweise Auskunft über Tathergang und Täter geben. Das lebendige oder tote, unverarbeitete oder verarbeitete Wildtier wird schließlich Gegenstand von Handel, Verkauf und Versand.¹⁰ In den Prozess des illegalen Wildtierhandels sind mehrere Akteure involviert,¹¹ deren Beteiligung und Identität durch weitere Ermittlungen und Kontrollen des grenzüberschreitenden Transports aufgedeckt werden können.

Das Bekämpfen des illegalen Wildtierhandels stellt, bedingt durch dessen klandestine Natur,¹² ein schwieriges Unterfangen dar: Um den negativen Folgen des illegalen Wildtierhandels entgegenzuwirken, ist es notwendig, diesen zunächst aufzuspüren.¹³

Das Aufspüren von illegalem Wildtierhandel ist Thema dieses Kapitels. Dabei ist es Ziel, eine kohärente, global-abstrakte Darstellung der Methoden, die von staatlicher Seite zum Aufspüren des illegalen Wildtierhandels eingesetzt

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- 7 Siehe vor allem Lavorgna (n 1), 3; William D Moreto und Andrew M Lemieux, 'From CRAVED to CAPTURED: Introducing a Product-Based Framework to Examine Illegal Wildlife Markets' (2015) 21(3) *European Journal on Criminal Policy and Research* 303, 311; Rebecca W Y Wong, '„Do you know where I can buy ivory?“: The illegal sale of worked ivory products in Hong Kong' (2018) 51(2) *Australian & New Zealand Journal of Criminology* 204, 204.
 - 8 Siehe wiederum Haas und Ferreira (n 3) 62; Julie Viollaz, Jessica Graham und Leonid Lantsman, 'Using script analysis to understand the financial crimes involved in wildlife trafficking' (2018) 69(5) *Crime, Law and Social Change* 595, 596.
 - 9 John E Cooper, Margaret E Cooper und Paul Budgen, 'Wildlife crime scene investigation: techniques, tools and technology' (2009) 9 *Endangered Species Research* 229, 229 – 230.
 - 10 Cf UNODC, *Wildlife and Forest Crime Analytic Toolkit* (revised ed, 2012) 41.
 - 11 Steven Broad, Teresa Mulliken und Dilys Roe, 'The Nature and Extent of Legal and Illegal Trade in Wildlife' in Sara Oldfield (Hrsg.), *Trade in Wildlife: Regulation for Conservation* (2012) 3, 15 – 17; Phelps, Biggs und Webb (n 2) 480 – 483.
 - 12 Shannon M Barber-Meyer, 'Dealing with the Clandestine Nature of Wildlife-Trade Market Surveys' (2010) 24(4) *Conservation Biology* 918, 919; Hans Ditrich, 'Illegaler Handel mit bedrohten Tier- und Pflanzenarten. Eine österreichische Perspektive' [2019] (1) *SLAK-Journal* 51, 54; Amy L Sonricker Hansen et al, 'Digital Surveillance: A Novel Approach to Monitoring the Illegal Wildlife Trade' (2012) 7(12) *PLoS ONE* [s.p.].
 - 13 Marcus A Asner, 'To Catch a Wildlife Thief: Strategies and Suggestions for the Fight Against Illegal Wildlife Trafficking' (2017) 12(1) *University of Pennsylvania Asian Law Review* 1, 15.

werden können, zu gewähren. Im Folgenden werden zunächst Kontext und Problemstellungen der Thematik erläutert. Anschließend erfolgt eine Darlegung von Wissensgenerierung und Wissensmanagement hinsichtlich des illegalen Wildtierhandels, die eine wesentliche Grundlage für das Aufspüren desselben bilden können. Die weitere Gliederung des Kapitels orientiert sich in der Erläuterung der diversen Methoden zum Aufspüren des illegalen Wildtierhandels an dessen chronologischem Ablauf. Zuerst wird das präventive Aufspüren von Wilderei erörtert, da Wilderei ein potentieller Ausgangspunkt des illegalen Wildtierhandels ist. Hernach wird die Tatortarbeit und konsekutiv das verdeckte Nachforschen behandelt. Daran anschließend erfolgt eine Auseinandersetzung mit dem Aufspüren von illegalem Wildtierhandel im Rahmen von Grenzkontrollen. Den Abschluss des Kapitels bildet eine kurze Conclusio.

II. Kontext und Problemstellungen

1. Rechtliche Grundlagen für das Aufspüren von Straftaten

Das Bestehen einer rechtlichen Ermächtigung ist Voraussetzung dafür, dass staatliche Behörden und deren Personal im Dienste des Aufspürens von Straftaten tätig werden können. Dieses Erfordernis entspringt, beispielshalber bezogen auf den europäischen Raum, dem Legalitätsprinzip, beziehungsweise normativen Anordnungen, die ebendiesem entsprechen.¹⁴ Sowohl das Erfordernis einer rechtlichen Ermächtigung, als auch die Einhaltung weiterer normativ festgelegter Voraussetzungen erfüllen eine fundamentale Schutzfunktion: Sie dienen dem Schutz aller Individuen vor der Macht des Staates, indem dessen Handlungsspielraum beschränkt wird.

Bisweilen erfordert das erfolgreiche Aufspüren von Straftaten den Einsatz von Methoden, die mit Eingriffen in sensible Bereiche einhergehen, so beispielsweise verdeckte Nachforschungen.¹⁵ Die Aufnahme einer solchen investigativen Tätigkeit durch staatliche Akteure ist auf Grund des jeder Person zukommenden Rechts auf Achtung des Privatlebens rechtlich besonders heikel.¹⁶

¹⁴ Mark Deiters, *Legalitätsprinzip und Normgeltung* (2006) 2.

¹⁵ Siehe etwa, bezogen auf das Aufspüren des illegalen Wildtierhandels, UNODC (n 10) 82.

¹⁶ Ibid 82 – 83.

In diesem Zusammenhang sind daher, in Kumulation zum Bestehen einer rechtlichen Ermächtigung, weitere normativ geregelte Voraussetzungen zu beachten.¹⁷

Die angeführten rechtlichen Schutzmechanismen führen zugleich zwangsläufig zur Erschwerung des Unterfangens, Straftäter mit den von ihnen begangenen Taten in Verbindung zu bringen. Die Rückbindung des staatlichen Handelns an eine rechtliche Grundlage hat schließlich zur Folge, dass in Ermangelung normativer Handlungsermächtigungen keine Handlungen zum Aufspüren von Straftaten gesetzt werden dürfen. Darüber hinaus haben staatliche Akteure, vorausgesetzt, dass eine normative Ermächtigung zum Aufspüren von Straftaten vorliegt, die deren investigatives Tätigwerden erlaubt, die bestehenden rechtlichen Beschränkungen bei der Ausführung ihrer Aufgaben zu wahren.

Es ist somit stets zu prüfen, ob die staatliche Behörde, die im Begriff ist, bezüglich des Aufspürens einer Straftat aktiv zu werden, auf Grund des normativen Rahmens dazu ermächtigt ist.

2. Spezifika des Aufspürens von illegalem Wildtierhandel

Die hinsichtlich des Aufspürens von illegalem Wildtierhandel existierenden Problemstellungen sind nicht zwingend von einheitlicher Natur, sondern können vielmehr auf Grund der von Staat zu Staat divergierenden Rahmenbedingungen unterschiedliche Ausprägungen aufweisen. Zudem ist zwischen zwei Ebenen zu differenzieren, auf denen potentiell Herausforderungen, die dem Aufspüren von illegalem Wildtierhandel entgegenstehen, auftreten können: Sowohl auf der Stufe der Legislative, als auch auf der Stufe der Exekutive besteht die Möglichkeit, Hürden, die das Aufspüren von illegalem Wildtierhandel erschweren, vorzufinden. Die Hürden, die auf Ebene der Judikative bestehen können, werden hier bewusst ausgeklammert. Dieses Kapitel ist auf das Aufspüren von illegalem Wildtierhandel, nicht aber auf die gerichtliche Behandlung dieses Delikts, bezogen.

¹⁷ Denis Clark, 'Covert surveillance and informer handling' in Tim Newburn, Tom Williamson und Alan Wright (Hrsg.), *Handbook of Criminal Investigation* (2007) 426, 440 – 447; UNODC (n 10) 82 – 83.

Rechtliche Grundlagen für das Aufspüren von illegalem Wildtierhandel können im (allgemeinen) Strafprozessrecht oder Polizeirecht, oder aber, spezifischer, etwa im Zollrecht oder Naturschutzrecht verankert sein.¹⁸ Das Erfordernis einer solchen normativen Ermächtigung stellt eine Problemstellung auf legislativer Stufe dar. Grund dafür ist, dass die Verantwortung hinsichtlich des Schaffens rechtlicher Grundlagen mangels allumfassender internationaler Regelungen den einzelnen Staaten zukommt.¹⁹ Dies hat bisweilen zur Folge, dass derartige normative Grundlagen nicht (im erforderlichen Maße) erzeugt werden und somit beispielsweise Methoden, die zum Aufspüren von Straftaten im Allgemeinen eingesetzt werden und auch für das Aufspüren von illegalem Wildtierhandel zweckmäßig wären, keine Verwendung finden können.²⁰

Auf Ebene der Exekutive stellt die Knappheit von Ressourcen, die in diesem Kontext tendenziell stärker ausgeprägt ist, als beim Aufspüren anderer Straftaten, eine zentrale Problematik dar.²¹ Diese wird später hinsichtlich des Aufspürens von Wilderei vertiefend erörtert. Grund für das im Zusammenhang mit der vorliegenden Thematik oftmals bestehende Personaldefizit ist mitunter deren mangelnde politische Priorisierung sowie die daraus resultierende finanzielle Unterversorgung mit dem Aufspüren des illegalen Wildtierhandels betrauter staatlicher Behörden.²²

In Ergänzung des Dargelegten ist anzuführen, dass der Mangel an Daten und Wissen, sowohl über den illegalen Wildtierhandel selbst, als auch über die

18 UNODC (n 10) 87–88.

19 Siehe etwa Robert S Anderson, 'Investigation, Prosecution and Sentencing of International Wildlife Trafficking Offenses in the U.S. Federal System' (1997) 12 (Juni) *National Environmental Enforcement Journal* 14, 16; ebenfalls zitiert in Mara E Zimmermann, 'The Black Market for Wildlife: Combating Transnational Organized Crime in the Illegal Wildlife Trade' (2003) 36(5) *Vanderbilt Journal of Transnational Law* 1657, 1665.

20 Cf EIA, *High profit/low risk: Reversing the wildlife crime equation*, A briefing for the Kasane Conference of Illegal Wildlife Trade (25 March 2015) 7.

21 Siehe zum komparativen Element Siv Rebekka Runhovde, 'Taking the Path of Least Resistance? Decision-Making in Police Investigations of Illegal Wildlife Trade' (2016) 11(1) *Policing: A Journal of Policy and Practice* 87, 97–98.

22 Broad, Mulliken und Roe (n 11) 3, 19; Angus Nurse, *Policing Wildlife: Perspectives on the Enforcement of Wildlife Legislation* (2015) 113–114; Melanie Wellsmith, 'Wildlife Crime: The Problems of Enforcement' (2011) 17(2) *European Journal on Criminal Policy and Research* 125, 134–135; zur mangelnden Priorisierung siehe auch Teresa Fajardo del Castillo, 'The European Union's Approach in the Fight against Wildlife Trafficking: Challenges Ahead' (2016) 19(1) *Journal of International Wildlife Law & Policy* 1, 7–8.

Methoden zum Aufspüren desselben,²³ das Intervenieren durch staatliche Akteure zusätzlich erschwert.

III. Wissensgenerierung und Wissensmanagement

Unter der Bezeichnung ‘Wissensgenerierung und Wissensmanagement’ (‘intelligence gathering and exchange’)²⁴ ist das gezielte Sammeln von Informationen über den illegalen Wildtierhandel, in Kombination mit deren Analyse und Verbreitung, zu verstehen.²⁵ Der Terminus ‘Informationen’ umfasst hierbei alle Informationen, die losgelöst vom Einzelfall Aufschluss über das Phänomen des illegalen Wildtierhandels als Ganzes geben, beispielsweise Information bezüglich des vorhandenen Marktes, der Handelswege und der involvierten Akteure.²⁶ Informationen werden dabei als Vorstufe des Wissens angesehen; der Begriff ‘Wissen’ bezeichnet bereits analysierte Informationen und somit eine unmittelbar verwertbare Ressource.²⁷

Wissensgenerierung und Wissensmanagement sind im Zusammenhang mit dem Aufspüren von illegalem Wildtierhandel hohe Relevanz beizumessen, da Wissen über denselben dazu führt, dass das Aufspüren des illegalen Wildtierhandels mit den in diesem Kapitel beschriebenen Methoden erleichtert wird.²⁸ Das hinsichtlich des illegalen Wildtierhandels zu generierende und zu verbreitende Wissen kann sich etwa auf die beteiligten Akteure und deren Motive,²⁹ die gehandelten Produkte,³⁰ die Rolle des Internets im Kontext des

23 Michael C Gavin, Jennifer N Solomon und Sara G Bank, ‘Measuring and Monitoring Illegal Use of Natural Resources’ (2010) 24(1) *Conservation Biology* 89, 98; cf Warchol, (n 1) 57.

24 UNODC (n 10) 80 – 82.

25 Ibid; cf Tim John und Mike Maguire, ‘Criminal intelligence and the Nation Intelligence Model’ in Tim Newburn, Tom Williamson und Alan Wright (Hrsg.), *Handbook of Criminal Investigation* (2007) 199, 203 – 209.

26 UNODC (n 10) 80.

27 Auch Moreto legt seinen Überlegungen eine solche terminologische Unterscheidung zugrunde, siehe William D Moreto, ‘Introducing intelligence-led conservation: bridging crime and conservation science’ (2015) 4(1) *Crime Science* 15, 5; siehe ebenso William D Moreto, Devin Cowan und Christina Burton, ‘Towards an Intelligence-Led Approach to Address Wildlife Crime in Uganda’ (2018) 12(3) *Policing: A Journal of Policy and Practice* 344, 349.

28 Asner (n 13) 3; Viollaz, Graham und Lantsman (n 8) 596 – 597.

29 Phelps, Biggs und Webb (n 2) 480 – 483; Warchol (n 1) 64 – 69.

illegalen Wildtierhandels,³¹ die Hotspots und Handelsrouten,³² den Markt³³ für illegal gehandelte Wildtiere und aus diesen gefertigte Produkte, sowie auf den Zusammenhang von Finanzkriminalität und illegalem Wildtierhandel³⁴ beziehen.

1. Wissensgenerierung

Das Sammeln von Informationen als Ausgangspunkt von Wissensgenerierung und Wissensmanagement über den illegalen Wildtierhandel kann auf mannigfaltige Weise und durch diverse Akteure erfolgen.³⁵ So können etwa Daten über Wilderei durch in Schutzzonen aufgebaute Kamerafallen erfasst werden.³⁶ Dies ermöglicht es, Rückschlüsse auf die Wilderer und deren Arbeitsweise zu ziehen; so unter anderem, ob Wilderer überwiegend einzeln oder in Gruppen agieren, mit welchen Werkzeugen und Transportmitteln sie allenfalls ausgestattet sind und in welchen Gebieten sie zu welcher Zeit aktiv sind.³⁷ Der Einsatz von Informanten ist ein weiteres Beispiel für das gezielte Sammeln von Informationen über den illegalen Wildtierhandel.³⁸

30 Moreto und Lemieux (n 7) 310 – 318.

31 Sonricker Hansen et al (n 12) 2 – 4; Joseph R Harrison, David L Roberts und Julio Hernandez-Castro, 'Assessing the extent and nature of wildlife trade on the dark web' (2016) 30(4) *Conservation Biology* 900, 901 – 903; Julio Hernandez-Castro und David L Roberts, 'Automatic detection of potentially illegal online sales of elephant ivory via data mining' (2015) 1 *PeerJ Computer Science* 1, 3 – 9; IFAW (n 1) 2 – 22; Lavorgna (n 1) 3 – 11.

32 Sade Moneron, Nicola Okes und Julian Rademeyer, *Pendants, Powder and Pathways. A rapid assessment of smuggling routes and techniques used in the illicit trade in African rhino horn*, Traffic Report (September 2017) 4 – 9; bezüglich der Identifikation am illegalen Wildtierhandel beteiligter Staaten siehe Nikkita Gunvant Patel et al, 'Quantitative methods of identifying the key nodes in the illegal wildlife trade network' (2015) 112(26) *PNAS* 7948, 7948 – 7951.

33 Barber-Meyer (n 12) 920 – 922.

34 Viollaz, Graham und Lantsman (n 8) 596 – 608.

35 UNODC (n 10) 81.

36 Douglas Cress und Zinta Zommers, 'Emerging technologies: Smarter ways to fight wildlife crime' (2014) 12 *Environmental Development* 62, 66; Abu Naser Mohsin Hossain et al, 'Assessing the efficacy of camera trapping as a tool for increasing detection rates of wildlife crime in tropical protected areas' (2016) 201 *Biological Conservation* 314, 314 – 318.

37 Hossain et al (n 36) 316 – 317.

38 UNODC (n 10) 85; Moreto, Cowan und Burton (n 27) 351; zur Relevanz von Informanten im spezifischen Kontext des Aufspürens von Wilderei siehe Nigel Dudley, Sue Stolton und Wendy Elliott, 'Wildlife crime poses unique challenges to protected areas' (2013) 19(1)

Die dem Sammeln von Informationen chronologisch folgende Analyse derselben kann beispielsweise durch das Bilden von Modellen erfolgen.³⁹ Dies ist bezüglich der Wissensgenerierung von wesentlicher Bedeutung, da dadurch allfällig bestehende Datenlücken überbrückt werden können.⁴⁰ Der Begriff 'Modellbildung' bezeichnet das Durchführen von Schätzungen anhand des vorhandenen Datenmaterials, wobei diese wiederum zur Strategie-Bildung im Dienste des Aufspürens des illegalen Wildtierhandels eingesetzt werden können.⁴¹ Die Modellbildung ist also eine Methode, durch die approximatives Wissen über das Phänomen des illegalen Wildtierhandels erlangt werden kann. Ein Beispiel für den Einsatz der beschriebenen Generierung von Schätzungsmodellen ist das Ermitteln von optimierten Wildhüter-Patrouillewegen.⁴² Hierbei werden bereits über die Wilderei gesammelte Daten herangezogen, um Routen zu identifizieren, auf denen Wildhüter mit erhöhter Wahrscheinlichkeit Wilderei aufspüren und verhindern können.⁴³

2. Wissensmanagement

Das Wissensmanagement ist, im Zusammenspiel mit der Wissensgenerierung, von hoher Relevanz. Es ist wesentlich, dass die erworbenen Kenntnisse möglichst weitläufig in den Reihen jener, die am Aufspüren des illegalen Wildtierhandels beteiligt sind, verbreitet werden.⁴⁴ So sind nicht nur Personen in Führungspositionen, sondern auch diejenigen, die unmittelbar im Einsatz sind, um den illegalen Wildtierhandel aufzuspüren, mit dem gewonnenen Wissen auszustatten: Dadurch wird das Aufspüren von illegalem Wildtierhandel ermöglicht beziehungsweise erleichtert.⁴⁵ Als potentielle Adressaten des generierten Wissens sind Beamte,⁴⁶ Fluglinienpersonal und Flughafenangestellte,⁴⁷ sowie Wildhüter⁴⁸ zu nennen.

PARKS 7, 10; hinsichtlich allgemeiner Informationen zum Einsatz von Informanten siehe Clark (n 17) 431 – 434.

39 Gavin, Solomon und Bank (n 23) 95.

40 Ibid 95 – 98.

41 Ibid.

42 Haas und Ferreira (n 3) 63.

43 Ibid 65 – 73; ähnlich auch Ferreguetti et al (n 5) 133 – 140.

44 Nurse (n 22) 120.

45 Moneron, Okes und Rademeyer (n 32) 15.

46 Gail Emilia Rosen und Katherine F Smith, 'Summarizing the Evidence on the International Trade in Illegal Wildlife' (2010) 7(1) *EcoHealth* 24, 30.

3. Zusammenspiel von Wissensgenerierung und Wissensmanagement

Hervorzuheben ist, dass Informationsbeschaffung nur dann positive Auswirkungen auf das Aufspüren des illegalen Wildtierhandels entfalten kann, wenn sie mit der Analyse und Verteilung der gesammelten Informationen einhergeht.⁴⁹ Diese stellen das Bindeglied zwischen (bloßer) Informationssammlung einerseits, und dem gezielten Einsatz der vorhandenen, zu Wissen umgewandelten Informationen im Rahmen des Aufspürens von illegalem Wildtierhandel andererseits, dar.

4. Wissensgenerierung und Wissensmanagement in der Praxis

Beispielhaft für den erfolgreichen Beitrag von Wissensgenerierung und Wissensmanagement zum Aufspüren von illegalem Wildtierhandel ist die von INTERPOL initiierte ‘Thunder’-Serie,⁵⁰ bis dato bestehend aus ‘Operation Thunderbird’ (2017),⁵¹ ‘Operation Thunderstorm’ (2018),⁵² sowie ‘Operation Thunderball’ (2019).⁵³ Im Vorfeld erarbeitetes und verbreitetes Wissen hinsichtlich der für den illegalen Wildtierhandel genutzten Routen sowie der diesbezüglichen Hotspots hat im Rahmen der ‘Thunder’-Serie dazu beigetragen, dass illegaler Wildtierhandel aufgespürt werden konnte: Jeder dieser drei Einsätze führte zur Identifizierung mehrerer hundert Verdächtiger, sowie zu mehr als 1 000 Beschlagnahmungen, durch die tausende Wildtiere gerettet werden konnten.⁵⁴ Auch die von April bis Mai 2019 durchgeführte ‘Operation Blizzard’, die gegen den illegalen Reptilienhandel gerichtet war, erzielte durch den Einsatz von Wissensgenerierung und Wissensmanagement maßgebliche Erfolge: Im Rahmen dieses Einsatzes wurden bislang mehr als 180 Verdächtige

47 Moneron, Okes und Rademeyer (n 32) 15.

48 Nurse (n 22) 120.

49 UNODC (n 10) 80.

50 INTERPOL, ‘Wildlife crime: global seizures and arrests in transcontinental operation’ (Webseite, 20. Juni 2018); ebenso auch INTERPOL, ‘Wildlife trafficking: organized crime hit hard by joint INTERPOL-WCO global enforcement operation’ (Webseite, 10. Juli 2019).

51 INTERPOL, ‘Anti-wildlife trafficking operation results in global arrests and seizures’ (Webseite, 2. März 2017).

52 INTERPOL, ‘Wildlife crime’ (n 50).

53 INTERPOL, ‘Wildlife trafficking’ (n 50).

54 INTERPOL, ‘Anti-wildlife trafficking operation’ (n 51); INTERPOL, ‘Wildlife crime’ (n 50); INTERPOL, ‘Wildlife trafficking’ (n 50).

identifiziert sowie mehr als 4 400 Beschlagnahmen durchgeführt, die die Rettung etwa ebensovieler Wildtiere zur Folge hatten.⁵⁵ Dies wurde durch zuvor hinsichtlich involvierter krimineller Netzwerke generiertes und zwischen den am Einsatz Beteiligten geteiltes Wissen ermöglicht.⁵⁶

IV. Aufspüren von Wilderei

Der illegale Wildtierhandel umfasst unter anderem den Handel mit gewilderten Tieren; Wilderei ist also ein potentieller Ausgangspunkt des illegalen Wildtierhandels.⁵⁷ Das Aufspüren von Wilderei als Maßnahme gegen den illegalen Handel mit gewilderten Tieren stellt dadurch zugleich eine Methode zum Aufspüren des illegalen Wildtierhandels dar. In der folgenden Erörterung wird zwischen zwei, jeweils zum Aufspüren von Wilderei einsetzbaren, Ressourcen unterschieden: personellen Ressourcen einerseits, technischen Ressourcen andererseits. Bezüglich des Personals erfolgt eine Auseinandersetzung mit dem zentralen Aspekt des Ressourcenmangels; bezüglich der Technik wird vorrangig eine Darstellung des in dieser Hinsicht bestehenden Potentials vorgenommen.

1. Personelle Ressourcen

Folgende wesentliche Fragen sind angesichts des oben angeführten Ressourcenmangels bezüglich der personellen Ressourcen, die dem Aufspüren von Wilderei gewidmet werden, zu stellen:⁵⁸ Wie viele Personen⁵⁹ werden benötigt, um der zu erfüllenden Aufgabe nachzukommen, um also ein möglichst hohes

55 INTERPOL, 'Illicit trade in reptiles: hundreds of seizures and arrests in global operation' (Webseite, 3 Juni 2019).

56 Ibid.

57 Zur analytischen Wertung von Wilderei als (potentiellem) Ausgangspunkt des illegalen Handels mit gewilderten Tieren siehe wiederum Haas und Ferreira (n 3) 62; Lavorgna (n 1) 1; Viollaz, Graham und Lantsman (n 8) 596.

58 Zu diesen und ähnlichen Fragen siehe UNODC (n 10) 75.

59 Diejenigen Personen, die zum Aufspüren von Wilderei eingesetzt werden, werden im Folgenden als Wildhüter bezeichnet; auch bei Ditrich findet diese Terminologie Verwendung, siehe Ditrich (n 12) 51, 61.

Maß an Wilderei aufspüren zu können? Wie ist ein effizienter Einsatz der zur Verfügung stehenden Arbeitskraft möglich?

Wildhüter sind mit der Problematik konfrontiert, dass sie unter keinen Umständen das gesamte Areal, in dem sie ihre Patrouille versehen, zu jeder Zeit überwachen können – sie haben schließlich nicht nur entlang von Grenzen, sondern weitläufiges, offenes Gebiet zu patrouillieren.⁶⁰

Diese Konstatierung bedeutet keinesfalls, dass eine Erhöhung der Anzahl von Wildhütern sinnlos wäre;⁶¹ sie weist vielmehr auf das ergänzend dazu aus-zuschöpfende Potential der zuvor angesprochenen Modellbildung hin. Das Bilden von Modellen umfasst hier, wie zuvor ausgeführt, das wissensbasierte Entwerfen von Routen, entlang derer Wildhüter patrouillieren; sohin deren strategischen Einsatz, der mit erhöhter Wahrscheinlichkeit zum Aufspüren von Wilderei führt⁶² und dadurch zu einer besseren Kontingentierung der vorhandenen personellen Ressourcen beiträgt. Auch die Verbesserung der Ausbildung von Wildhütern ist, im Dienste einer effizienteren Nutzung des zur Verfügung stehenden Personals, naturgemäß von Relevanz.⁶³

60 Haas und Ferreira (n 3) 62; Andrew M Lemieux, 'Geotagged photos: a useful tool for criminological research?' (2015) 4(3) *Crime Science* 1, 4; Nurse (n 22) 134.

61 Zur Relevanz der Erhöhung der Anzahl an Wildhütern siehe Chris Barichievy et al, 'Do armed field-rangers deter rhino poachers? An empirical analysis' (2017) 209 *Biological Conservation* 554, 559; ähnlich auch Kate E Jenks, JoGayle Howard und Peter Leimgruber, 'Do Ranger Stations Deter Poaching Activity in National Parks in Thailand?' (2012) 44(6) *Biotropica* 826, 832.

62 Siehe wiederum Haas und Ferreira (n 3) 65–73; Ferreguetti et al (n 5) 133–140; zu Vorschlägen hinsichtlich einer gezielteren Vorgehensweise in Bezug auf das Patrouillieren siehe Dudley, Stolton und Elliott (n 38) 9–10.

63 Christian Nellemann et al (Hrsg.), *The environmental crime crisis: threats to sustainable development from illegal exploitation and trade in wildlife and forest resources* (2014) 88; siehe vertiefend, zur Auswahl und zum Training von Wildhütern in Südafrika, Greg Warchol und Dale Kapla, 'Policing the wilderness: A descriptive study of wildlife conservation officers in South Africa' (2012) 36(2) *International Journal of Comparative and Applied Criminal Justice* 83, 83–100.

2. Technische Ressourcen

Die technisch unterstützte Überwachung des Geländes kann mittels Drohnen⁶⁴ und mittels akustischer Fallen⁶⁵ durchgeführt werden. Qua Drohneinsatz können Fotos und/oder Videos aus der Vogelperspektive aufgenommen und simultan an Wildhüter übermittelt werden, wodurch das (frühzeitige) Erspähen von Wilderern ermöglicht wird.⁶⁶ Drohnen haben weiters den Vorteil, dass sie kostengünstig zu erstehen und einfach zu steuern sind.⁶⁷ Akustische Fallen erfassen durch Aufnahme von Schallwellen abrupte Störungen der normalerweise vorherrschenden Geräuschkulisse (beispielsweise durch Motorgeräusche sowie Schüsse) und senden die erfassten Informationen wiederum an Wildhüter.⁶⁸ Die technisch unterstützte Überwachung des Geländes trägt somit dazu bei, dass der zielgerichtete Einsatz von Wildhütern an den Orten, an denen Wilderer anzutreffen sind, bewirkt werden kann.

Die Überwachung von Wildtieren kann durch Mikrochips⁶⁹ sowie durch Funkhalsbänder⁷⁰ erfolgen. Diese dienen dazu, das überwachte Wildtier zu orten und dessen gesundheitliche Daten zu messen, so beispielsweise die Herzfrequenz, deren Erhöhung Auskunft über die potentielle Anwesenheit von Wilderern geben könnte.⁷¹ Mikrochips und Funkhalsbänder unterscheiden sich im Wesentlichen anhand der Art ihrer Applikation voneinander: Während Mikrochips implantiert werden, werden Funkhalsbänder äußerlich am Wildtier angebracht. Diese beiden technischen Methoden haben den

64 Zum Einsatz von Drohnen im Kontext des Aufspürens von illegalem Wildtierhandel siehe Lian Pin Koh und Serge A Wich, 'Dawn of drone ecology: low-cost autonomous aerial vehicles for conservation' (2012) 5(2) *Tropical Conservation Science* 121, 129 – 130; Michael J Shaffer und Joseph A Bishop, 'Predicting and Preventing Elephant Poaching Incidents through Statistical Analysis, GIS-Based Risk Analysis, and Aerial Surveillance Flight Path Modeling' (2016) 9(1) *Tropical Conservation Science* 525, 532.

65 Cress und Zommers (n 36) 63.

66 Koh und Wich (n 64) 126.

67 Ibid 128 – 129.

68 Cress und Zommers (n 36) 63.

69 Steven J Bograd et al, 'Biologging technologies: new tools for conservation. Introduction' (2010) 10 *Endangered Species Research* 1, 1 – 5; Cress und Zommers (n 36) 64 – 65; Paul O'Donoghue und Christian Rutz, 'Real-time anti-poaching tags could help prevent imminent species extinctions' (2016) 53(1) *Journal of Applied Ecology* 5, 6 – 9.

70 Cress und Zommers (n 36) 66.

71 O'Donoghue und Rutz (n 69) 6; ebenso Bograd et al (n 69) 1.

Vorteil, dass sie wiederum zielgerichtetes Handeln der Wildhüter ermöglichen.⁷² Zu bedenken ist jedoch, dass das Ausstatten einzelner Wildtiere mit Mikrochips und Funkhalsbändern mit nicht unerheblichem Aufwand einhergeht und mit technischen Hürden verbunden ist. Exemplarisch seien hier die Erhöhung der Akkulaufzeit und der Übermittlungsgeschwindigkeit der erhobenen Daten genannt.⁷³

Abschließend sei auf ein wesentliches Faktum, das sich implizit aus den genannten Ausführungen ergibt, explizit hingewiesen: Die Verwendung aller beschriebenen technischen Ressourcen ist immer nur dann nutzbringend, wenn sie in Kumulation mit dem Einsatz von personellen Ressourcen stattfindet. Die Technik kann nämlich das Aufspüren von Wilderei wesentlich erleichtern, nicht jedoch das Tätigwerden von Wildhütern ersetzen.⁷⁴

V. Tatortarbeit

Die oftmals gegebene Internationalität des illegalen Wildtierhandels⁷⁵ und dessen stufenweiser Ablauf haben zur Folge, dass man nicht von 'einem' existenten Tatort sprechen kann, sondern vielmehr das Vorhandensein mehrerer Tatorte, die womöglich in unterschiedlichen Ländern situiert sind, berücksichtigen muss.⁷⁶ Diese diversen Örtlichkeiten können wiederum von gänzlich verschiedener Beschaffenheit sein; Cooper et al führen beispielhalber unter anderem den Ort der Wilderei, sowie etwa zoologische Sammlungen und Märkte, an denen illegaler Wildtierhandel betrieben wird, an.⁷⁷ Der Terminus 'Tatort' bezeichnet hier also, unter Bezugnahme auf das soeben Dargelegte, jeden Ort, der im Zusammenhang mit illegalem Wildtierhandel steht und dessen Untersuchung Aufschluss über das begangene Delikt geben kann.

Der Begriff der 'Tatortarbeit' bezeichnet eine vielschichtige, systematische Verflechtung von Handlungsabläufen, die als Teil des Ermittlungsverfahrens

⁷² Cress und Zommers (n 36) 65; O'Donoghue und Rutz (n 69) 6.

⁷³ Bograd et al (n 69) 4; O'Donoghue und Rutz (n 69) 7.

⁷⁴ Hossain et al (n 36) 318; O'Donoghue und Rutz (n 69) 8; vgl auch Nellemann et al (Hrsg.) (n 63) 90.

⁷⁵ UNODC (n 10) 67.

⁷⁶ Cooper, Cooper und Budgen (n 9) 229 – 230.

⁷⁷ Ibid.

am Tatort gesetzt werden.⁷⁸ Ziel der Tatortarbeit ist es, die am Tatort vorhandenen Spuren möglichst vollständig zu identifizieren, zu dokumentieren und für deren weitere, insbesondere gerichtliche, Verwendung zu konservieren.⁷⁹ Hinsichtlich der Tatortarbeit bestehen Grundsätze, die auf jeden Tatort, unabhängig davon, welcher Straftat er entspringt, anzuwenden sind;⁸⁰ folglich gilt dasselbe auch für die diversen Tatorte des illegalen Wildtierhandels. Es ist nicht erforderlich, auf die verschiedenen Arten von Tatorten (des illegalen Wildtierhandels) bezogene Differenzierungen vorzunehmen.

1. Vorbereitung des Tatorteinsatzes

Da es, um den Tatort möglichst unverändert anzutreffen, von wesentlicher Bedeutung ist, denselben rasch aufzusuchen, empfiehlt es sich zunächst, die für die Tatortarbeit relevante Ausrüstung bereits im Vorhinein bereitzulegen.⁸¹ Zu dieser gehören beispielsweise Behälter zum Transportieren von Proben, Thermometer, Aufzeichnungsgeräte, Handschuhe und Schutzkleidung, sowie auch Erste-Hilfe-Ausrüstung.⁸² All diese Gegenstände dienen der möglichst umfassenden Bearbeitung des Tatortes, beziehungsweise dem Schutz derer, die den Tatort untersuchen.

78 Rainer Leonhardt, Holger Roll und Frank-Rainer Schurich, *Kriminalistische Tatortarbeit* (1995) 8.

79 Jason H Byrd und Lerah K Sutton, 'Defining a Crime Scene and Physical Evidence Collection' in Jane E Huffman und John R Wallace (Hrsg.), *Wildlife Forensics: Methods and Applications* (2012) 51, 51 – 52.

80 Siehe hierzu Peter Pfefferli, *Die Spur: Ratgeber für die spurenkundliche Praxis* (2007) 34. Über die Grundsätze hinausgehend bestehen selbstverständlich divergierende Anforderungen verschiedenartiger Orte an die Tatortarbeit. Bezüglich der Spezifika von Orten der Wilderei siehe etwa Michelle D Hamilton und Elizabeth M Erhart, 'Forensic Evidence Collection and Cultural Motives for Animal Harvesting' in Jane E Huffman und John R Wallace (Hrsg.), *Wildlife Forensics: Methods and Applications* (2012) 65, 68 – 75.

81 Cooper, Cooper und Budgen (n 9) 230; UNODC (n 10) 93.

82 Martin PC Lawton und John E Cooper, 'Wildlife crime scene visits' (2009) 6(1) *Applied Herpetology* 29, 33 – 35.

2. Sicherung des Tatorts und Tatortuntersuchung

Die ersten im Rahmen der Tatortarbeit vorzunehmenden Schritte sind von der Person, die zuerst am Tatort eintrifft, zu setzen.⁸³ Sie hat, sofern auf Grund konkreter Gefahrensituationen erforderlich, zunächst jene Maßnahmen zu unternehmen, die zur Gefahrenabwehr notwendig sind.⁸⁴ In weiterer Folge ist es wichtig, den Tatort abzusperren: Auf diese Weise wird der Tatort als solcher erkenntlich gemacht und zugleich die Regulierung des Zugangs ermöglicht.⁸⁵

Nach Beendigung der Tatortsicherung erfolgt die Tatortuntersuchung, die sich in Spurensuche, Spurensicherung und Spurenbewertung untergliedern lässt.⁸⁶ Der Terminus 'Spuren' bezeichnet hierbei 'materielle Erscheinungen, die mit einem kriminalistisch relevanten Ereignis in Zusammenhang stehen (...) [und] die Identifizierung des Verursachers und/oder des vorherigen Ganzen ermöglichen'.⁸⁷

Mittels systematischer Spurensuche werden zunächst die wesentlichen zu erfassenden Spuren identifiziert, wodurch vermieden werden kann, dass ebensolche übersehen werden.⁸⁸ Daran anschließend erfolgt die Spurensicherung, die durch Fotografie, verbale Beschreibung oder Zeichnung, sowie qua kriminaltechnischer Methoden vorgenommen werden kann.⁸⁹ Unter Umständen ist es sogar möglich, bestimmte Spuren als solche, beziehungsweise deren Spureenträger mitzunehmen, um dadurch eine umfassende Sicherung zu erzielen.⁹⁰ Die Spurenbewertung dient schließlich der Separation der kriminalistisch bedeutenden Spuren von jenen, die nicht zur Aufklärung des am Tatort begangenen Delikts eingesetzt werden können – so etwa von Trugspuren.⁹¹

83 Byrd und Sutton (n 79) 53.

84 Ibid 52; zur übergeordneten Relevanz der Sicherheit siehe auch Lawton und Cooper (n 82) 37.

85 Cooper, Cooper und Budgen (n 9) 231; Pfefferli (n 80) 35.

86 Leonhardt, Roll und Schurich (n 78) 96.

87 Ibid 47; hinsichtlich der diversen Spurenarten sowie vertiefender Informationen zu deren Suche, Sicherung und Verpackung/Aufbewahrung/Versand siehe Pfefferli (n 80) 68 – 145.

88 Ausführliches zur Spurensuche siehe Leonhardt, Roll und Schurich (n 78) 96 – 105.

89 Genaueres zur Spurensicherung, sowie auch zum Verhältnis der verschiedenen Sicherungsmethoden untereinander, siehe ibid 105 – 108.

90 Ibid 97, 107.

91 Cf ibid 45 – 51.

Resümierend lässt sich die Aussage treffen, dass die Tatortarbeit dichotom in Tatortsicherung und Tatortuntersuchung gegliedert ist. Die Tatortsicherung setzt sich aus den beiden Prozessen der Gefahrenabwehr und der Absperrung des Tatorts zusammen; die Tatortuntersuchung ist in Spurensuche, Spurensicherung und Spurenbewertung zu unterteilen. Aus chronologischer Sicht betrachtet, erfolgt zunächst die Gefahrenabwehr, anschließend die Absperrung des Tatortes. Konsekutiv ist die Spurensuche, dann die Spurensicherung, und letztendlich die Spurenbewertung vorzunehmen.

3. Spurenschutz und Dokumentation

In Ergänzung der dargelegten aufeinanderfolgenden Schritte der Tatortarbeit sind sowohl der Spurenschutz, als auch die Dokumentation essentiell. So ist bei all den Aktionen, die vom ersten Betreten des Tatorts an gesetzt werden, darauf zu achten, Veränderungen desselben zu vermeiden. Von zentraler Bedeutung ist, dass Spuren weder vernichtet, noch nachträglich gelegt werden.⁹²

Zusätzlich sollte von Beginn der Tatortarbeit an eine lückenlose schriftliche Dokumentation bezüglich aller relevanten Fakten (exemplarisch sind hier Datum, Ort und Zeit des Auffindens des Tatorts zu nennen) und Vorgänge (beispielsweise am Tatort vorgenommene Handlungen) geführt werden.⁹³ In Ergänzung dazu ist es von Nutzen, Fotografien vom Tatort aufzunehmen, die sowohl zur Dokumentation des Tatorts als auch als Beweismittel eingesetzt werden können.⁹⁴

Des Weiteren ist es wichtig, eine akkurate Beweismittelkette durch Dokumentation der jeweiligen Beweismittel inklusive dazugehöriger Informationen, zum Beispiel der Beweismittelbeschreibung sowie des Namens der Person, die den Beweis gesammelt hat, aufrechtzuerhalten, so dass die Beweismittel im Strafverfahren nutzbringend eingesetzt werden können.⁹⁵

92 Pfefferli (n 80) 34.

93 Cooper, Cooper und Budgen (n 9) 232 – 233; zur Relevanz der umfangreichen Dokumentation siehe auch UNODC (n 10) 93.

94 Siehe vor allem Pfefferli (n 80) 38 – 40; Byrd und Sutton (n 79) 58 – 59.

95 Byrd und Sutton (n 79) 55; Lawton und Cooper (n 82) 42 – 43.

4. Spezifisches Fachwissen

Zur Bearbeitung eines Tatorts des illegalen Wildtierhandels ist das Vorhandensein geoforensischer Expertise hilfreich. Geoforensik ist die Analyse von Bodenablagerungen und Gesteinen, die vom Tatort stammen, zum Zwecke der Ausforschung von Verbrechen.⁹⁶ Durch diese Analyse kann ermittelt werden, ob bestimmte Personen, Tiere oder Gegenstände sich am Tatort aufgehalten haben – was zu bejahen ist, wenn ihnen Partikel anhaften, die den vom Tatort genommenen Proben entsprechen.⁹⁷ Geoforensische Kenntnisse sind somit etwa zur Herstellung einer Verbindung zwischen Täter und Tatort, aber auch zur Bestimmung der Herkunft aufgefundener Wildtiere, sinnvoll.⁹⁸ Ist jemand am Tatort präsent, der über geoforensisches Hintergrundwissen verfügt, so ermöglicht dies die Identifizierung und Sammlung relevanter Proben.

Zudem empfiehlt es sich, tierärztliche Sachverständige zur Tatortarbeit heranzuziehen. Deren Wissen ist für das vollständige Erfassen der am Tatort auffindbaren Informationen (beispielsweise für das Untersuchen von vor Ort aufgefundenen toten Wildtieren), für die Behandlung noch lebender, sich am Tatort befindender Wildtiere, sowie in weiterer Folge auch hinsichtlich des Erstellens von Gutachten von hoher Relevanz.⁹⁹

VI. Verdeckte Nachforschung

Unter dem Terminus ‘verdeckte Nachforschung’ werden im vorliegenden Kapitel diverse Ermittlungsmethoden, denen das bereits anhand der Bezeichnung erkennbare Element der Klandestinität gemeinsam ist, verstanden. Oftmals wird durch den Einsatz solcher Methoden das Aufspüren von ille-

96 Ruth M Morgan et al, ‘The role of forensic geoscience in wildlife crime detection’ (2006) 162 *Forensic Science International* 152, 152.

97 Cf *ibid.*

98 Siehe zur Geoforensik *ibid* 152 – 161; Ähnliches zur (Molekular-)Forensik siehe etwa bei Christian Pitra und Dietmar Lieckfeldt, ‘Molekular-forensischer Beitrag zur Überführung eines mutmaßlichen Wilderers: ein Fallbericht’ (1999) 45(4) *Zeitschrift für Jagdwissenschaft* 270, 270 – 274.

99 Lawton und Cooper (n 82) 29 – 42.

galem Wildtierhandel erst ermöglicht.¹⁰⁰ In anderen Fällen können durch an das Aufspüren des illegalen Wildtierhandels anschließende, verdeckte Nachforschungen weitere in den illegalen Wildtierhandel involvierte Akteure identifiziert werden.¹⁰¹ Das verdeckte Nachforschen ist somit bezüglich des Aufspürens von illegalem Wildtierhandel als solches, aber auch hinsichtlich der Identifikation Beteiligter, von Nutzen.

Unter anderem die kontrollierte Lieferung, die Überwachung sowie auch der Gebrauch falscher Identitäten durch staatliche Akteure zählen zu jenen Praktiken, die unter den Begriff des verdeckten Nachforschens subsumiert werden können und im Folgenden beispielhaft erörtert werden.¹⁰²

1. Kontrollierte Lieferung

‘Kontrollierte Lieferung’ bedeutet, dass der Transport einer bereits von staatlicher Seite aufgespürten Lieferung, die Gegenstand des illegalen Wildtierhandels ist oder sein könnte, unter strenger Überwachung durch zuständige Behörden durchgeführt wird.¹⁰³ Diese Vorgehensweise stellt eine Alternative zur sofortigen Beschlagnahmung der Lieferung dar und dient der Ermittlung möglichst vieler in den illegalen Wildtierhandel involvierter Akteure.¹⁰⁴ Die Entscheidung, ob das Durchführen einer kontrollierten Lieferung sinnvoll ist, hat einzelfallbezogen zu erfolgen. So ist jeweils in concreto vorab zu beurteilen, ob der hohe Zeit- und Kostenaufwand, der auf Grund der intensiven Überwachung notwendigerweise mit der kontrollierten Lieferung einhergeht, in Anbetracht des daraus erwachsenden Nutzens gerechtfertigt ist.¹⁰⁵ Des Weiteren ist abzuwägen, ob die erfolgreiche Durchführung der kontrollierten Lieferung wahrscheinlich ist.¹⁰⁶ Bei lebendig gehandelten Wildtieren ist darüber hinaus deren Wohl zu bedenken.¹⁰⁷

¹⁰⁰ UNODC (n 10) 82.

¹⁰¹ Zur Relevanz weiterer, an das Aufspüren des illegalen Wildtierhandels anschließender Ermittlungen siehe Moneron, Okes und Rademeyer (n 32) 15.

¹⁰² UNODC (n 10) 82.

¹⁰³ INTERPOL/CITES, *Controlled Deliveries. A Technique for Investigating Wildlife Crime* (2007) 6 – 7; UNODC (n 10) 84.

¹⁰⁴ INTERPOL/CITES (n 103) 7; UNODC (n 10) 83; zum Nutzen der kontrollierten Lieferung siehe auch EIA (n 20) 7.

¹⁰⁵ INTERPOL/CITES (n 103) 8.

¹⁰⁶ Cf *ibid* 18.

¹⁰⁷ *Ibid* 9.

2. Überwachung und Einsatz falscher Identitäten

Die Verwendung falscher Identitäten durch mit dem Aufspüren des illegalen Wildtierhandels beauftragte Personen und die verdeckte Überwachung können verschiedene Erfolgsergebnisse liefern: Das Erlangen von Beweismitteln, die in weiterer Folge zur Verurteilung der involvierten Akteure führen, die Feststellung, dass der hinsichtlich einer konkreten Person bestehende Verdacht unbegründet war, sowie die – zu keinem der beiden genannten Ergebnisse führende, aber dennoch hilfreiche – Beschaffung von Informationen über die konkrete Vorgehensweise der beteiligten Akteure.¹⁰⁸ Sowohl die Verwendung falscher Identitäten, als auch die verdeckte Überwachung sind keine spezifisch auf das Aufspüren von illegalem Wildtierhandel bezogenen Methoden; der Einsatz ebendieser verspricht hier allerdings überaus positive Ergebnisse. In der Praxis wird das Potential, das die Anwendung derartiger konventioneller Methoden zum Aufspüren des illegalen Wildtierhandels birgt, mitunter bereits realisiert: So ist etwa die in den USA erfolgte Verurteilung einer in den illegalen Handel von Nashorn-Hörnern und Elfenbein involvierten Person zu einer Freiheitsstrafe von 5 Jahren und 10 Monaten durch verdeckte Nachforschungen ermöglicht worden.¹⁰⁹

VII. Grenzkontrollen

Grenzkontrollen, etwa durch Zollbehörden,¹¹⁰ spielen eine zentrale Rolle hinsichtlich des Aufspürens von illegalem Wildtierhandel. Dies ist sowohl durch den internationalen Charakter des illegalen Wildtierhandels,¹¹¹ als auch durch die ambivalente Natur der Grenzen bedingt: Je nachdem, ob an einer staatlichen Grenze effiziente Kontrollen der transportierten Güter erfolgen,

¹⁰⁸ Edwin W Kruisbergen, Deborah de Jong und Edward R Kleemans, 'Undercover policing. Assumptions and Empirical Evidence' (2011) 51(2) *British Journal of Criminology* 394, 403.

¹⁰⁹ *United States of America v Zhifei Li* (D NJ, Crim Nos 13 – 113 und 13 – 552, 17. Dezember 2013).

¹¹⁰ Kate J Brandis et al, 'Novel detection of provenance in the illegal wildlife trade using elemental data' (2018) 8(1) *Scientific Reports* 1, 1; Mariya Polner, 'Customs and Illegal Trade: Old Game – New Rules' (2015) 30(3) *Journal of Borderlands Studies* 329, 339; Heidi E Kretser et al, 'Mobile decision-tree tool technology as a means to detect wildlife crimes and build enforcement networks' (2015) 189 *Biological Conservation* 33, 33.

¹¹¹ Siehe hierzu wiederum UNODC (n 10) 67.

stellt sie Opportunität für das Aufspüren von illegalem Wildtierhandel, oder aber für das Durchführen von illegalem Wildtierhandel dar.¹¹² Schließlich sind Kontrollen des grenzüberschreitenden Transports auf Grund der Tatsache, dass mitunter versucht wird, illegalen Wildtierhandel durch Einsatz falscher Dokumente zu verschleiern,¹¹³ essentiell. Die praktische Relevanz von Grenzkontrollen hinsichtlich des Aufspürens des illegalen Wildtierhandels wird beispielsweise durch die 'Operation Thunderstorm', im Rahmen derer etwa die illegale Einfuhr von 18 Tonnen Aalfleisch nach Kanada verhindert werden konnte, verdeutlicht.¹¹⁴

Die Frachtkontrolle mittels Röntgenstrahlung, sowie der Einsatz von Hunden zur Kontrolle des grenzüberschreitenden Transports, sind im vorliegenden Kontext von wesentlicher Bedeutung, da sie dazu beitragen, dass verborgene Gegenstände des illegalen Wildtierhandels aufgespürt werden können: Die in den illegalen Wildtierhandel verstrickten Akteure versuchen nämlich naturgemäß, das illegale Handelsgut als solches unkenntlich zu machen; exemplarisch sei hierfür das Verstauen von toten Seepferdchen in Jausenboxen genannt.¹¹⁵ Die Zerkleinerung von Wildtierprodukten und deren anschließende Vermengung mit anderen Waren stellt eine weitere Methode, das illegal Gehandelte zu verschleiern, dar.¹¹⁶ Auch hinsichtlich lebender Wildtiere besteht das Bestreben, diese vor dem Transport zu camouflieren; beispielhaft ist das Unterbringen von Vögeln in Plastikröhren zum Zwecke des illegalen Wildtierhandels anzuführen.¹¹⁷ Röntgenstrahlung ist hierbei insofern von Nutzen, als durch diese kaschierte Gegenstände visuell als solche erkannt werden können.¹¹⁸ Hunde wiederum können vor allem auf Grund ihrer olfaktorischen Sensibilität zum Aufspüren verborgener Gegenstände des illegalen Wildtierhandels beitragen.¹¹⁹ In der Praxis haben sowohl Röntgen-

112 Ibid 99; cf Moneron, Okes und Rademeyer (n 32) 2; und INTERPOL, 'Wildlife crime' (n 50).

113 UNODC (n 10) 46.

114 INTERPOL, 'Wildlife crime' (n 50).

115 INTERPOL, 'Anti-wildlife trafficking operation' (n 51).

116 Moneron, Okes und Rademeyer (n 32) 2.

117 *R vs Jungthirapanich* [2002] EWCA Crim 2259.

118 Siehe hierzu, sehr anschaulich und detailliert, Selina Kolokytha et al, 'Improving custom's border control by creating a reference database of cargo inspection X-ray images' (2017) 2(3) *Advances in Science, Technology and Engineering Systems Journal* 60, 61 – 65.

119 Sarah C Beebe, Tiffani J Howell und Pauleen C Bennett, 'Using Scent Detection Dogs in Conservation Settings: A Review of Scientific Literature Regarding Their Selection' (2016) 3 *Frontiers in Veterinary Science* 1, 6 – 7.

strahlung als auch Hunde bereits erfolgreich zum Aufspüren von illegalem Wildtierhandel beigetragen; dies etwa im Zuge der oben beschriebenen Einsätze 'Operation Thunderbird' und 'Operation Thunderstorm'.¹²⁰

In Ergänzung des soeben Ausgeführten sei darauf hingewiesen, dass die eingangs identifizierte Problemstellung des Ressourcenmangels auch bezüglich der Kontrollen des grenzüberschreitenden Transports besteht.¹²¹

VIII. Conclusio

Der illegale Wildtierhandel ist dadurch gekennzeichnet, dass er von einer Vielzahl an Akteuren in mehreren Stufen vollzogen wird. Diese Komplexität hat zur Folge, dass eine große Vielfalt an Methoden besteht, die eingesetzt werden können, um denselben ausfindig zu machen.

Der illegale Wildtierhandel kann zunächst präventiv durch das Aufspüren von Wilderei ausgedacht werden. Das Aufspüren von Wilderei stellt, vor allem in Anbetracht der weitläufigen Gebiete, auf denen sich Wildtiere aufzuhalten pflegen, ein schwieriges Unterfangen dar. Technische Ressourcen können zur Erleichterung desselben eingesetzt werden. Von jedem in den illegalen Wildtierhandel eingebundenen Tatort können Informationen extrahiert werden, die der Verbindung von involvierten Akteuren mit der begangenen Straftat dienlich sind. Durch die Verwendung geeigneter Ausrüstung, sowie durch die Einbeziehung sachkundiger Personen, ist eine Optimierung der Tatortarbeit möglich. Auch verdeckte Nachforschung kann hinsichtlich des Aufspürens von illegalem Wildtierhandel zweckdienlich sein. Durch kontrollierte Lieferung, verdeckte Überwachung und den Einsatz falscher Identitäten ist es möglich, illegalen Wildtierhandel aufzuspüren, der ansonsten verborgen bleiben würde. Schließlich können Grenzkontrollen, die etwa durch Zollbehörden vorgenommen werden, zum Aufspüren des illegalen Wildtierhandels beitragen. Insbesondere im Hinblick auf dessen internationalen Charakter stellen Kontrollen des grenzüberschreitenden Transports ein probates Mittel zum Aufspüren desselben dar.

¹²⁰ INTERPOL, 'Anti-wildlife trafficking operation' (n 51); INTERPOL, 'Wildlife crime' (n 50).

¹²¹ Polner (n 110) 335; implizit auch Kretser et al (n 110) 33 – 34.

Sowohl der Mangel an rechtlichen Grundlagen als auch das oftmals gegebene Defizit an Ressourcen und Wissen bezüglich des illegalen Wildtierhandels erschweren das Aufspüren desselben. Diese Problemstellungen sind nicht als universal gleichmäßig vertreten anzusehen; sie weisen vielmehr in verschiedenen Ländern unterschiedliche Ausprägungen auf.

Um das Aufspüren des illegalen Wildtierhandels unter erfolgreicher Bewältigung der dargelegten Hürden in erhöhtem Maße zu gewährleisten, ist es notwendig, das Potential konventioneller Methoden, die nicht spezifisch auf das Aufspüren des illegalen Wildtierhandels zugeschnitten sind, zu erkennen und deren Einsatz zu ermöglichen. Dem bestehenden Mangel an Wissen und Ressourcen kann durch Wissensgenerierung und Wissensmanagement begegnet werden. Die dadurch erfolgende Anhebung des Niveaus an Wissen über den illegalen Wildtierhandel in den Reihen derer, die an dessen Aufspüren beteiligt sind, ermöglicht den ressourcenschonenderen und somit effektiveren Einsatz der Methoden zum Aufspüren des illegalen Wildtierhandels und ist somit von zentraler Relevanz.

Bibliographie

- Anderson, Robert S, 'Investigation, Prosecution, and Sentencing of International Wildlife Trafficking Offenses in the U.S. Federal System' (1997) 12 (Juni) *National Environmental Enforcement Journal* 14
- Asner, Marcus A, 'To Catch a Wildlife Thief: Strategies and Suggestions for the Fight Against Illegal Wildlife Trafficking' (2017) 12(1) *University of Pennsylvania Asian Law Review* 1
- Barber-Meyer, Shannon M, 'Dealing with the Clandestine Nature of Wildlife-Trade Market Surveys' (2010) 24(4) *Conservation Biology* 918
- Barichievy, Chris et al, 'Do armed field-rangers deter rhino poachers? An empirical analysis' (2017) 209 (Mai) *Biological Conservation* 554
- Basu, Gautam, 'Combating illicit trade and transnational smuggling: key challenges for customs and border control agencies' (2014) 8(2) *World Customs Journal* 15
- Beebe, Sarah C, Tiffani J Howell und Pauleen C Bennett, 'Using Scent Detection Dogs in Conservation Settings: A Review of Scientific Literature Regarding Their Selection' (2016) 3 (Oktober) *Frontiers in Veterinary Science* 1
- Brandis, Kate J et al, 'Novel detection of provenance in the illegal wildlife trade using elemental data' (2018) 8(1) *Scientific Reports* 1

- Bograd, Steven J et al, 'Biologging technologies: new tools for conservation. Introduction' (2010) 10 (März) *Endangered Species Research* 1
- Broad, Steven, Teresa Mulliken und Dilys Roe, 'The Nature and Extent of Legal and Illegal Trade in Wildlife' in Sara Oldfield (Hrsg.), *Trade in Wildlife: Regulation for Conservation*, London, Sterling, VA: Earthscan Publications, 2012, 3
- Byrd, Jason H und Lerah K Sutton, 'Defining a Crime Scene and Physical Evidence Collection' in Jane E Huffman und John R Wallace (Hrsg.), *Wildlife Forensics: Methods and Applications*, Hoboken, NJ: John Wiley & Sons, Ltd., 2012, 51
- Chan, Hon-Ki et al, 'Improve customs systems to monitor global wildlife trade. Widely used trade codes lack taxonomic granularity' (2015) 348(6232) *Science Advances* 291
- Clark, Denis, 'Covert surveillance and informer handling' in Tim Newburn, Tom Williamson und Alan Wright (Hrsg.), *Handbook of Criminal Investigation*, Cul-lompton: Willan, 2007, 426
- Conrad, Kirsten, 'Trade bans: a perfect storm for poaching?' (2012) 5(3) *Tropical Conservation Science* 245
- Cooper, John E, Margaret E Cooper und Paul Budgen, 'Wildlife crime scene investigation: techniques, tools and technology' (2009) 9 (August) *Endangered Species Research* 229
- Cress, Douglas und Zinta Zommers, 'Emerging technologies: Smarter ways to fight wildlife crime' (2014) 12 (Juni) *Environmental Development* 62
- Deiters, Mark, *Legalitätsprinzip und Normgeltung*, Tübingen: Mohr Siebeck, 2006
- Di Minin, Enrico et al, 'A framework for investigation illegal wildlife trade on social media with machine learning' (2018) 33(1) *Conservation Biology* 210
- Ditrich, Hans, 'Illegaler Handel mit bedrohten Tier- und Pflanzenarten. Eine österreichische Perspektive' [2019] (1) *SIAC-Journal* 51
- Di Vittorio, Massimiliano et al, 'Positive demographic effects of nest surveillance campaigns to counter illegal harvest of the Bonelli's eagle in Sicily (Italy)' (2018) 21(2) *Animal Conservation* 120
- Drobot, Elena V et al, 'Risk Management in Customs Control' (2017) 13(2) *Economy of Region* 550
- Dudley, Nigel, Sue Stolton und Wendy Elliott, 'Wildlife crime poses unique challenges to protected areas' (2013) 19(1) *PARKS* 7
- EIA, *High profit/low risk: Reversing the wildlife crime equation*, A briefing for the Kasane Conference of Illegal Wildlife Trade, London: EIA, 25. März 2015

- Eliason, Stephen L, 'Trophy Poaching: A Routine Activities Perspective' (2012) 33(1) *Deviant Behavior* 72
- Fajardo del Castillo, Teresa, 'The European Union's Approach in the Fight against Wildlife Trafficking: Challenges Ahead' (2016) 19(1) *Journal of International Wildlife Law & Policy* 1
- Ferreguetti, Atilla C et al, 'One step ahead to predict potential poaching hotspots: Modeling occupancy and detectability of poachers in a neotropical rainforest' (2018) 227 (November) *Biological Conservation* 133
- Gavin, Michael C, Jennifer N Solomon und Sara G Bank, 'Measuring and Monitoring Illegal Use of Natural Resources' (2010) 24(1) *Conservation Biology* 89
- Haas, Timothy C und Sam M Ferreira, 'Optimal patrol routes: interdicting and pursuing rhino poachers' (2018) 19(1) *Police Practice and Research* 61
- Hamilton, Michelle D und Elizabeth M Erhart, 'Forensic Evidence Collection and Cultural Motives for Animal Harvesting' in Jane E Huffman und John R Wallace (Hrsg.), *Wildlife Forensics: Methods and Applications*, Hokoken, NJ: John Wiley & Sons, Ltd., 2012, 65
- Han, Chang-Ryung und Hans Nelen, 'Decoupling Policy and Practice in the Fight Against Wildlife Smuggling' (2017) 57(1) *British Journal of Criminology* 132
- Harrison, Joseph R, David L Roberts und Julio Hernandez-Castro, 'Assessing the extent and nature of wildlife trade on the dark web' (2016) 30(4) *Conservation Biology* 900
- Hernandez-Castro, Julio und David L Roberts, 'Automatic detection of potentially illegal online sales of elephant ivory via data mining' (2015) 1 *PeerJ Computer Science* 1
- Holmern, Tomas, John Muya und Eivin Røskaft, 'Local law enforcement and illegal bushmeat hunting outside the Serengeti National Park, Tanzania' (2007) 34(1) *Environmental Conservation* 55
- Hossain, Abu Naser Mohsin et al, 'Assessing the efficacy of camera trapping as a tool for increasing detection rates of wildlife crime in tropical protected areas' (2016) 201 *Biological Conservation* 314
- IFAW, *Caught in the web: Wildlife trade on the internet*, London: IFAW, July 2005
- INTERPOL, 'Anti-wildlife trafficking operation results in global arrests and seizures' (Webseite, 2. März 2017) <<https://www.interpol.int/News-and-Events/News/2017/Anti-wildlife-trafficking-operation-results-in-global-arrests-and-seizures>>

- INTERPOL, 'Illicit trade in reptiles: hundreds of seizures and arrests in global operation' (Webseite, 3. Juni 2019) <<https://www.interpol.int/News-and-Events/News/2019/Illicit-trade-in-reptiles-hundreds-of-seizures-and-arrests-in-global-operation>>
- INTERPOL, 'Wildlife crime: global seizures and arrests in transcontinental operation' (Webseite, 20. Juni 2018) <<https://www.interpol.int/News-and-Events/News/2018/Wildlife-crime-global-seizures-and-arrests-in-transcontinental-operation>>
- INTERPOL, 'Wildlife trafficking: organized crime hit hard by joint INTERPOL-WCO global enforcement operation' (Webseite, 10. Juli 2019) <<https://www.interpol.int/News-and-Events/News/2019/Wildlife-trafficking-organized-crime-hit-hard-by-joint-INTERPOL-WCO-global-enforcement-operation>>
- INTERPOL/CITES, *Controlled Deliveries. A Technique for Investigating Wildlife Crime* (2007)
- Jaclin, David, 'Poached lives, traded forms: Engaging with animal trafficking around the globe' (2016) 55(3) *Social Science Information* 400
- Jenks, Kate E, JoGayle Howard und Peter Leimgruber, 'Do Ranger Stations Deter Poaching Activity in National Parks in Thailand?' (2012) 44(6) *Biotropica* 826
- John, Tim und Mike Maguire, 'Criminal intelligence and the Nation Intelligence Model' in Tim Newburn, Tom Williamson und Alan Wright (Hrsg.), *Handbook of Criminal Investigation*, Cullompton: Willan, 2007, 199
- Koh, Lian Pin und Serge A Wich, 'Dawn of drone ecology: low-cost autonomous aerial vehicles for conservation' (2012) 5(2) *Tropical Conservation Science* 121
- Kolokytha, Selina et al, 'Improving custom's border control by creating a reference database of cargo inspection X-ray images' (2017) 2(3) *Advances in Science, Technology and Engineering Systems Journal* 60
- Kretser, Heidi E et al, 'Mobile decision-tree tool technology as a means to detect wildlife crimes and build enforcement networks' (2015) 189 (September) *Biological Conservation* 33
- Kruisbergen, Edwin W, Deborah de Jong und Edward R Kleemans, 'Undercover policing. Assumptions and Empirical Evidence' (2011) 51(2) *British Journal of Criminology* 394
- Kurland, Justin und Stephen F Pires, 'Assessing U.S. Wildlife Trafficking Patterns: How Criminology and Conservation Science Can Guide Strategies to Reduce the Illegal Wildlife Trade' (2017) 38(4) *Deviant Behavior* 375
- Lavorgna, Anita, 'Wildlife trafficking in the Internet age' (2014) 3(5) *Crime Science* 1

- Lawton, Martin PC und John E Cooper, 'Wildlife crime scene visits' (2009) 6(1) *Applied Herpetology* 29
- Lemieux, Andrew M, 'Geotagged photos: a useful tool for criminological research?' (2015) 4(3) *Crime Science* 1
- Leonhardt, Rainer, Holger Roll und Frank-Rainer Schurich, *Kriminalistische Tatortarbeit*, Heidelberg: Kriminalistik Verlag, 1995
- Linkie, Matthew et al, 'Safeguarding Sumatran tigers: evaluating effectiveness of law enforcement patrols and local informant networks' (2015) 52(4) *Journal of Applied Ecology* 851
- Lunstrum, Elizabeth, 'Feed them to the lions: Conservation violence goes online' (2017) 79 *Geoforum* 134
- Makarenko, Vladimir G, 'Customs criminalistics (forensic science): A new concept for customs control' (2017) 11(1) *World Customs Journal* 73
- Marvin, David C et al, 'Integrating technologies for scalable ecology and conservation' (2016) 7 *Global Ecology and Conservation* 262
- Moneron, Sade, Nicola Okes und Julian Rademeyer, *Pendants, Powder and Pathways. A rapid assessment of smuggling routes and techniques used in the illicit trade in African rhino horn*, TRAFFIC Report, Pretoria: TRAFFIC, September 2017
- Moreto, William D, 'Introducing intelligence-led conservation: bridging crime and conservation science' (2015) 4(1) *Crime Science* 15
- Moreto, William D und Andrew M Lemieux, 'From CRAVED to CAPTURED: Introducing a Product-Based Framework to Examine Illegal Wildlife Markets' (2015) 21(3) *European Journal on Criminal Policy and Research* 303
- Moreto, William D, Devin Cowan und Christina Burton, 'Towards an Intelligence-Led Approach to Address Wildlife Crime in Uganda' (2018) 12(3) *Policing: A Journal of Policy and Practice* 344
- Morgan, Ruth M et al, 'The role of forensic geoscience in wildlife crime detection' (2006) 162 *Forensic Science International* 152
- Nellemann, Christian et al (Hrsg.), *The environmental crime crisis: threats to sustainable development from illegal exploitation and trade in wildlife and forest resources*, Nairobi: UNEP, 2014
- Nurse, Angus, *Policing Wildlife: Perspectives on the Enforcement of Wildlife Legislation*, Basingstoke: Palgrave Macmillan, 2015
- O'Donoghue, Paul und Christian Rutz, 'Real-time anti-poaching tags could help prevent imminent species extinctions' (2016) 53(1) *Journal of Applied Ecology* 5

- Patel, Nikkita Gunvant et al, 'Quantitative methods of identifying the key nodes in the illegal wildlife trade network' (2015) 112(26) *PNAS* 7948
- Pfefferli, Peter, *Die Spur: Ratgeber für die spurenkundliche Praxis*, Heidelberg: Hüthig Jehle Rehm, 2007
- Phelps, Jacob, Duan Biggs und Edward L Webb, 'Tools and terms for understanding illegal wildlife trade' (2016) 14(9) *Frontiers in Ecology and the Environment* 479
- Pitra, Christian und Dietmar Lieckfeldt, 'Molekular-forensischer Beitrag zur Überführung eines mutmaßlichen Wilderer: ein Fallbericht' (1999) 45(4) *Zeitschrift für Jagdwissenschaft* 270
- Polner, Mariya, 'Customs and Illegal Trade: Old Game – New Rules' (2015) 30(3) *Journal of Borderlands Studies* 329
- Roberts, Paul, 'Law and criminal investigation' in Tim Newburn, Tom Williamson und Alan Wright (Hrsg.), *Handbook of Criminal Investigation* Cullompton: Willan, 2007, 92
- Rosen, Gail Emilia und Katherine F Smith, 'Summarizing the Evidence on the International Trade in Illegal Wildlife' (2010) 7(1) *EcoHealth* 24
- Runhovde, Siv Rebekka, 'Taking the Path of Least Resistance? Decision-Making in Police Investigations of Illegal Wildlife Trade' (2016) 11(1) *Policing: A Journal of Policy and Practice* 87
- Sandbrook, Chris, 'The social implications of using drones for biodiversity conservation' (2015) 44 (November) *Ambio* 636
- Shaffer, Michael J und Joseph A Bishop, 'Predicting and Preventing Elephant Poaching Incidents through Statistical Analysis, GIS-Based Risk Analysis, and Aerial Surveillance Flight Path Modeling' (2016) 9(1) *Tropical Conservation Science* 525
- Smart, Alan, 'Customs control over illicit international trade: The impact of different forms of illegality' (2015) 4(1) *Anuac* 42
- Sonricker Hansen, Amy L et al, 'Digital Surveillance: A Novel Approach to Monitoring the Illegal Wildlife Trade' (2012) 7(12) *PLoS ONE* 1
- Soon, Jan Mei und Louise Manning, 'Food smuggling and trafficking: The key factors of influence' (2018) 81 *Trends in Food Science & Technology* 132
- Tomkins, Kevin, 'Police, Law Enforcement and the Environment' (2005) 16(3) *Current Issues in Criminal Justice* 294
- UNODC, *Wildlife and Forest Crime Analytic Toolkit*, New York, NY: United Nations, revised edition 2012

- Viollaz, Julie, Jessica Graham und Leonid Lantsman, 'Using script analysis to understand the financial crimes involved in wildlife trafficking' (2018) 69(5) *Crime, Law and Social Change* 595
- Warchol, Greg L, 'The Transnational Illegal Wildlife Trade' (2004) 17(1) *Criminal Justice Studies* 57
- Warchol, Greg und Dale Kapla, 'Policing the wilderness: A descriptive study of wildlife conservation officers in South Africa' (2012) 36(2) *International Journal of Comparative and Applied Criminal Justice* 83
- Wellsmith, Melanie, 'Wildlife Crime: The Problems of Enforcement' (2011) 17(2) *European Journal on Criminal Policy and Research* 125
- Williams, Vivienne L et al, 'Questionnaire survey of the pan-African trade in lion body parts' (2017) 12(10) *PLoS ONE* 1
- Wong, Rebecca WY, '„Do you know where I can buy ivory?": The illegal sale of worked ivory products in Hong Kong' (2018) 51(2) *Australian & New Zealand Journal of Criminology* 204
- Zimmermann, Mara E, 'The Black Market for Wildlife: Combating Transnational Organized Crime in the Illegal Wildlife Trade' (2003) 36(5) *Vanderbilt Journal of Transnational Law* 1657

Zitierte Entscheidungen

- R vs Jungthirapanich* [2002] EWCA Crim 2259
- United States of America v Eyoum* (7th Cir, No 95 – 2781, 5 Juni 1996)
- United States of America v Zhifei Li* (D NJ, Crim Nos 13 – 113 and 13 – 552, 17 Dezember 2013)

Chapter Eleven

Forensic DNA Evidence and Wildlife Trafficking

RORY McFADDEN

This chapter explains and discusses the role of wildlife DNA as forensic evidence. It suggests that wildlife DNA evidence is a valuable tool in the investigation and prosecution of wildlife trafficking offences, although as a field it faces particular challenges that may affect its resilience in the courtroom. For this reason, and considering recent trends towards greater scrutiny of forensic sciences as evidence, this chapter argues that wildlife DNA scientists should be prioritising adherence to the external quality standards most palatable by the court.

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I. Introduction

In contrast to most crime types, the most common question in wildlife trafficking cases is not who has committed the crime, but whether a crime has occurred at all.¹ This question can be complicated because of the types of evidence typical of wildlife trafficking crime scenes, which can make it difficult to identify animals, parts or derivatives as belonging to a certain protected group. Where morphological or other identification methods fail, the forensic analysis of wildlife DNA (desoxyribonucleic acid) can be a useful tool to discover information about the animal, and ultimately determine whether the animal has in fact been trafficked.

Despite its usefulness, forensic wildlife DNA forensics as a science remains somewhat in its infancy, and relatively niche.² For this reason, it may be more difficult for wildlife DNA evidence to demonstrate adherence to quality standards expected by the courtroom, and consequently to resist legal challenge. Currently, it is unclear whether and to what extent wildlife DNA evidence is rejected in court or not tendered at all; however, if the goal is to successfully prosecute more perpetrators under wildlife trafficking legislation, it is important that wildlife DNA forensics develops in step with trends and changes in evidence law.

1 M Katherine Moore and Irving L. Kornfield, 'Best Practices in Wildlife Forensic DNA' in Jane E Huffman and John R Wallace (eds), *Wildlife Forensics: Methods and Applications* (2012) 202, 203.

2 John R Wallace and Jill C Ross, 'The Application of Forensic Science to Wildlife Evidence' in Jane E Huffman and John R Wallace (eds), *Wildlife Forensics: Methods and Applications* (2012) 35, 36 – 37.

The available literature regarding wildlife DNA forensics is largely authored by practitioners and aimed at the wildlife forensics community.³ Many sources contain detailed and technical discussions about best practise and standards internal to wildlife forensics as a science. However, few outline the external standards of the courtroom, which inform the admissibility and assigned probative weight of all types of forensic evidence. Increasingly, courts expect tangible evidence of how reliable a forensic method is, especially where that method is novel or uncommon.

The aim of this chapter is to discuss the function of wildlife DNA as forensic evidence in the investigation and prosecution of wildlife trafficking offenders, and recommend, from a legal perspective, which developments should be prioritised in order to strengthen wildlife DNA as a forensic tool.

Part II of this chapter introduces and explains the basic function of DNA as a forensic science, both in the human crime context and the less familiar wildlife trafficking context. Part III discusses broadly the legal frameworks in place that permit and regulate the use of forensic science as evidence in the courtroom, and outlines some relevant criticisms and trends within this field. Part IV describes some of the methods used by forensic scientists in preparing wildlife DNA evidence. Part V outlines the various forensic applications of wildlife DNA, and part VI looks at particular challenges faced by wildlife forensic scientists in bringing DNA evidence into the courtroom. Part VII discusses possible future directions of wildlife DNA as a robust and reliable forensic science.

3 See, for example, Jane E Huffman and John R Wallace (eds), *Wildlife Forensics: Methods and Applications*, (2012); Brandt Cassidy and Robert Gonzales, 'DNA Testing in Animal Forensics' (2005) 69 *Journal of Wildlife Management* 1454; Arati Iyengar, 'Forensic DNA analysis for animal protection and biodiversity conservation: a review' (2014) 22 *Journal for Nature Conservation* 195; Adrian Linacre and Shanan Tobe, *Wildlife DNA Analysis: Applications in Forensic Science* (2013); Bruce Budowle et al, 'Recommendations for animal DNA forensic and identity testing' (2005) 119(5) *International Journal of Legal Medicine* 119.

II. Scientific background and context

1. DNA

Deoxyribonucleic acid, or 'DNA', is present in the cells of almost every living being. DNA contains sections called 'genes', the structure and sequence of which make up each individual's 'genetic profile'.⁴ Genes are, essentially, pieces of code passed down from an individual's parents which contain the requisite instructions for how that individual will develop, function, and reproduce as an organism.⁵ Hence, DNA contributes to observable characteristics, such as height and colouring.⁶

An individual's genetic profile stays the same over their lifetime, but genetic profiles vary between all individuals except identical siblings.⁷ In humans, about 0.1 % of DNA is different from person to person.⁸ This variation makes DNA useful as a forensic science because it can be used to identify or exclude perpetrators and victims from biological material found at crime scenes. In general, DNA provides a significant amount of information about a relevant individual compared to other evidence types. The process of extracting this information is called 'DNA profiling', or 'DNA barcoding'.

2. Defining wildlife DNA

The distinction between human and non-human DNA is not dichotomous. Humans are just one of hundreds of thousands of species on the planet whose DNA may be used for the purposes of investigation. That said, human DNA has been the main focus of DNA forensics since its conception.⁹ Forensic practitioners who analyse human DNA have an

4 Peter Cobb, cited in Peter White (ed), *Crime Scene to Court – The Essentials of Forensic Science* (1998) 305; Katherine Cashman, *Lawyers and DNA: Understanding and Challenging the Evidence*, PhD Thesis, The University of Tasmania (2017) 47.

5 Andrei Semikhodskii, *Dealing with DNA Evidence: A Legal Guide* (2007) 3.

6 Ibid 8, 12.

7 Melissa Kidder, 'Human DNA v. Non-Human DNA: A Look at the General Admissibility of Non-Human DNA in the Courts' (2009) 35 *Ohio Northern University Law Review* 397, 399; Semikhodskii (n 5) 8, 12.

8 Kidder (n 7) 399.

9 Ibid 397 – 399.

extensive and detailed appreciation of the entire human genome, which has been meticulously studied, mapped and validated over several decades. It is so well understood, human DNA may even be analysed using widely available and inexpensive commercial 'kits'.¹⁰ A comparatively moderate amount of research has gone into wildlife DNA.

Not only is wildlife DNA forensics nowhere near as developed as its human counterpart, instead of just one species, it encompasses at least the 7,500 species considered endangered or critically endangered on the International Union for Conservation of Nature's (IUCN) *Red List of Threatened Species*.¹¹ The same lengthy process must be repeated to map out the genome of each new species of interest.¹²

Furthermore, human DNA evidence is much more broadly and frequently employable as evidence in criminal proceedings, since all crime types involve humans, and few involve animals. Crimes which victimise animals are generally regarded as lower priority in comparison to crimes against people and property.¹³

3. DNA analyses

3.1. DNA profiling

A sample of DNA from a known individual may be linked to, for example, a blood stain at a crime scene based on whether the two profiles are identical or not. This is referred to as an exclusionary test, since there is no chance that the profiles came from the same individual if they are not identical. However, if the profiles are identical, there is still an extremely small chance that it is a coincidence. The average probability that two unrelated profiles will randomly match is, theoretically, one in several billion. As such, this analysis comes with a high degree of certainty.¹⁴

¹⁰ Moore and Kornfield (n 1) 205.

¹¹ IUCN, 'IUCN Red List of Threatened Species' (Web page, undated).

¹² See Robert Ogden, 'Forensic science, genetics and wildlife biology: getting the right mix for a wildlife DNA forensics lab' (2010) 6 *Forensic Science, Medicine and Pathology* 172, 172.

¹³ Ibid.

¹⁴ Kidder (n 7) 397; Semikhodskii (n 5) 22, 49, 108 – 24.

3.2. DNA barcoding

Wildlife DNA is often concerned with matching samples to their 'taxa', the pre-defined groups to which animals belong, rather than to an individual. Because of the hereditary nature of DNA, the DNA profiles of closely related individuals tend to have a high degree of similarity, while more distantly related samples will generally show more dissimilarity. This is because diversity between organisms is caused by genetic mutations occurring over time.¹⁵ The less immediate the relationship between two individuals, the more inherited changes may have accumulated over the course of their respective ancestors descending from their most recent common ancestor.¹⁶ The taxa of the individual, such as family, population or species, are identifiable with reference to particular portions of DNA which are shared with other members of any given taxon, and distinguishable with reference to those portions which vary between them.

By comparing sections of genes known to be shared by all members of a certain taxon, practitioners can infer whether an unknown sample is a part of that group. Before this is possible, the particular section of a gene or number of genes which is both exclusive and common to all members must be identified. This requires extensive examination of samples, called 'reference data', from the relevant taxon to form a 'control population'. The greater the size and diversity of the control population, the more statistically certain it is that the unknown sample is or is not part of the group.¹⁷ The fewer the reference samples, the less conclusive the inference can be.

3.3. Forensic DNA evidence

Criminal justice systems routinely employ DNA analyses as forensic evidence.¹⁸ Generally, DNA profiling is considered to have a sounder

¹⁵ George Sensabaugh and D H Kaye, 'Non-Human DNA Evidence' (1998) 39(1) *Jurimetrics* 1, 15.

¹⁶ Hassan Ramadan and Nabih Baeshen, 'Biological identifications through DNA barcodes' in Gbolagade Akeem Lameed (ed), *Biodiversity Conservation and Utilization in a Diverse World* (2012) 109, 124 – 125.

¹⁷ Budowle et al (n 3) 296 – 298.

¹⁸ Semikhodskii (n 5) 1 – 2.

scientific basis than many other forensic techniques.¹⁹ Forensic DNA evidence can be especially advantageous in the investigation of wildlife trafficking. As is discussed below, laws about wildlife trafficking necessitate that the animal in question belongs (or belonged) to a certain taxon which the relevant law seeks to protect. Proving this can be complicated. Seized wildlife and animal derivatives may not be susceptible to morphological or other methods of identification where the sample is, for example: partial; has been processed into a product; or, is in an immature state (such as an embryo).²⁰ In such instances, DNA barcoding can be useful, since only a tiny amount of any type of biological material is needed. Sometimes protected species have ‘lookalike’ unprotected species, or parallel legal markets allow trade in certain populations of the same animal. In those cases, DNA may be the only way to distinguish whether or not the particular sample is protected. Related wildlife crimes such as poaching almost always occur outdoors, where evidence is exposed and may decay. DNA is robust; a useable DNA sample may often be extracted from the types of decayed or chemically treated material typical of crime scenes.²¹

III. Legal bases

The form and severity of national wildlife trafficking legislation is ultimately left to individual legislatures. *CITES*, the *Convention on International Trade in Endangered Species of Wild Flora and Fauna*, provides an international framework that seeks to regulate trade in vulnerable species to sustainable levels.²² For this reason, legislation regarding the protection of endangered species varies widely between jurisdictions, and national wildlife trafficking

19 United States, National Research Council, *Strengthening Forensic Science in the United States: A Path Forward* (2009) 7, 9.

20 Rebecca N Johnson, ‘The use of DNA identification in prosecuting wildlife-traffickers in Australia: do the penalties fit the crimes?’ (2010) 6 *Forensic Science, Medicine, and Pathology* 211, 211 – 212.

21 Shanan Tobe, James Govan and Lindsey Welch, ‘Tackling poaching: Recovery of human DNA profiles from deer remains’ (2011) 3 *Forensic Science International: Genetics Supplement Series* e265.

22 Opened for signature 3 March 1973, 993 UNTS 243 (entered into force 1 July 1975).

legislation can encompass a range of criminal behaviours. However, offences generally have the common element that the animal targetted is a member of a protected group.²³

In defining protected animals, often legislation refers specifically to the *CITES* Appendices, which list some 5 000 animal species whose survival is immediately or potentially threatened by trade. Some jurisdictions include additional species, or provide their own list.²⁴ Hence the species, origin or individual from which a trafficked sample originates is always a material fact in wildlife trafficking cases.

Although admissibility rules about forensic evidence vary between jurisdictions, there is a fairly consistent approach regarding the standards and thresholds to which forensic evidence must adhere.²⁵ It is also possible due to the often transnational nature of wildlife trafficking that evidence being collected and prepared within one jurisdiction will be subject to standards set by another.²⁶

1. Forensic evidence in the courtroom

1.1. Expert opinion evidence

Expert opinion evidence is admissible as an exception to the rule that witnesses may only give evidence about facts.²⁷ This opinion rule is generally in place to prevent reliance by the court on unsubstantiated or subjective information, which may prejudice the accused disproportionately to whatever probative value the opinion offers. Expert evidence is excepted because, occasionally, useful evidence is not susceptible to interpretation by a layperson; someone who is capable of its

23 UNODC, *Wildlife and Forest Crime Analytic Toolkit* (rev ed, 2012) 23; Tanya Wyatt, *Wildlife Trafficking: A Deconstruction of the Crime, the Victims and the Offenders* (2013) 106.

24 For example, *Wildlife (Protection) Act 1972* (India) and *Royal Decree for Wildlife Preservation and Protection B.E. 2535 1992* (Thailand).

25 Gary Edmond et al, 'Admissibility Compared: The Reception of Incriminating Expert Evidence (i. e., Forensic Science) in Four Adversarial Jurisdictions' (2013) 3 *University of Denver Criminal Law Review* 31, 31.

26 UNODC (n 23) 34.

27 Craig Adam, *Forensic Evidence in Court: Evaluation and Scientific Opinion* (2016) 2 – 4; Edmond et al (n 25) 33.

interpretation and explanation must give a conclusion based on his or her own expertise. DNA analysis falls into this category.²⁸

When the court accepts this type of evidence, it has limited scope to assess its quality. This is because experts make subjective decisions when forming an opinion which the court has no means to evaluate.²⁹ Since judges can only assess objective evidence, it is important that an enquiry is instead made into the scientific rigour of expert evidence on a case-by-case basis, at both a foundational and an applied level.³⁰

1.2. Scientific rigour

In the most comprehensive case, an enquiry into scientific rigour would include an assessment of:

- Whether the discipline generally can provide the kind of information which it purports to (field validity);
- Whether the particular method used is capable of producing the conclusion it purports to (method validity);
- Whether the expert is competent at the method; ie:
 - o Whether he or she possesses the knowledge and skill necessary to employ the method generally (qualification); and,
 - o Whether he or she in fact employed the method competently in the given instance (execution).³¹

While not all admissibility rules address each of these points that can (and should) be expected of forensic scientists, weakness in any of the above aspects of scientific rigour can affect the value the decision-maker assigns the evidence, or form the basis for a legal challenge.³²

²⁸ United States, President's Council of Advisors on Science and Technology, *Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods*, Report to the President (September 2016), Executive Office of the President (US), September 2016) 1, 23.

²⁹ Rachel Searston and Jason Chin, 'The legal and scientific challenge of black box expertise' (2019) 38(2) *University of Queensland Law Journal* 238, 246, 266.

³⁰ United States, President's Council of Advisors on Science and Technology (n 28) 47 – 49.

³¹ Samuel Goss and Jennifer Mnookin, 'Expert Information and Expert Evidence: A Preliminary Taxonomy' (2003) 34 *Seton Hall Law Review* 148, 146 – 149.

³² Edmond et al (n 25) 33.

1.3. Admissibility and weight

While admissibility refers to whether or not the evidence may be tendered at all, the weight of the evidence is its probative value, or the degree to which it should be factored into the verdict.³³ Statutes about admissibility and weight often employ terms such as ‘formal qualifications’, ‘specialised knowledge’, ‘within a recognised field’ and ‘training, study and experience’.³⁴

An assessment of some or all of these criteria, with empirical evidence supporting them, will inform the trial judge on how to handle the expert evidence. It may be that the judge is satisfied that the science is probative, foundationally valid, and accurately applied and admit it without issue; if not, he or she may discretionarily exclude it in its entirety. The judge may alternatively leave it to the opposing counsel to cross-examine the expert to reveal possible flaws in their assessment, or sometimes simply pick and choose which parts of the evidence meet the threshold and only admit those conclusions.³⁵ Finally, the judge may admit the evidence in its entirety, but take into account any uncertainty in deciding the weight to assign the evidence.

1.4. Criticisms and future directions

It should be noted that the law of expert opinion evidence, especially in relation to the forensic sciences, has been criticised in many jurisdictions for leniency in admitting and assigning weight to opinions without a thorough examination of the validity of the putative expert’s field, methods and competence.³⁶ For example, courts have been criticised for assessing the weight of forensic evidence using criteria which are more

33 See generally Gary Edmond, ‘Legal versus Non-Legal Approaches to Forensic Science Evidence’ (2016) 20 *International Journal of Evidence and Proof* 3–28.

34 In the United States, scrutinising factors are outlined in *Daubert v Merrell Dow Pharmaceuticals Inc* 125 L Ed 2d 469, 595; in Canada, see *R v Mohan* [1994] 2 SCR 9; in Australia, see for example *Evidence Act 1995* (Cth) s 79. See generally Jason M Chin, ‘Abbey Road: The (Ongoing) Journey to Reliable Expert Evidence’ (2018) 9(3) *Canadian Bar Review* 422–459; Edmond et al (n 25) 31.

35 See, for example, *R v Abbey* (2009) ONCA [62]–[70].

36 See, for example, United States, President’s Council of Advisors on Science and Technology (n 28); United States, National Research Council (n 19); Gary Edmond, ‘What Lawyers Should Know About Forensic Sciences’ (2015) 36 *Adelaide Law Review* 33, 34.

appropriate for assessing admissibility; that is, for allowing weaknesses in scientific rigour to go to the probative value of the evidence, rather than to the perhaps more appropriate question of whether to exclude the evidence entirely.³⁷

This is not to imply that wildlife forensic scientists need not bother adhering to a high standard of scientific rigour just because ‘most judges under most circumstances admit most forensic science’.³⁸ On the contrary, these criticisms may be predictive of the direction of expert evidence law generally, and indicative of higher standards courts may (and should) expect of forensic sciences going forward. Additionally, because of the transnational nature of wildlife trafficking as a crime type, experts in any one jurisdiction may be subject to the legal standards of another. This suggests that experts should aim to be operating at the highest standard possible.

IV. Methods

Generally, four different types of facility may undertake wildlife DNA barcoding: a multi-use research laboratory, a university forensics laboratory, a commercial DNA forensics laboratory, or, most rarely, a dedicated wildlife forensics laboratory.³⁹ Regardless of which of these laboratory types does the testing, strict forensic procedures should be adhered to.

37 Kristy Martire and Gary Edmond, ‘Rethinking Expert Opinion Evidence’ (2017) 40 *Melbourne University Law Review* 967, 970; see generally Jason M Chin, ‘Psychological science’s replicability crisis and what it means for science in the courtroom’ (2014) 20 *Psychology, Public Policy, and Law* 225 – 238.

38 Jane Campbell Moriarty and Michael J Saks, ‘Forensic Science: Grand Goals, Tragic Flaws, and Judicial Gatekeeping’ (2006) 44 *Judges Journal* 16, 28.

39 Ogden (n 12) 175 – 176.

1. Collection and storage

Storage and handling of samples for forensic purposes is held to a notably higher standard than for research purposes.⁴⁰ Any material likely to contain DNA evidence should be extracted, isolated, and preserved in a sealed environment at a temperature below -20°C to avoid degradation, especially of softer tissues.⁴¹ Personnel handling evidence should wear clean, protective clothing including gloves, have long hair tied back, and use sterilised or disposable equipment on only one sample at a time to avoid contamination.⁴² Best practise would also include archiving a sample of the DNA, in case opposing counsel seek to conduct independent testing.⁴³ Access to samples, computers, and facilities should be otherwise restricted.⁴⁴

Wildlife DNA may be extracted from a wide range of post-mortal biological material such as blood, flesh, urine, faeces, skin, hair, scales, bone, feathers, claws, teeth, shells, scales, venom, and embryonic tissue, as well as processed products such as cooked meats, furs, tanned leather goods, and medicines.⁴⁵ Using modern techniques, trace amounts of DNA may also be amplified to be tested, especially where a sample may contain more than one source, such as in traditional medicines or game sausage.⁴⁶ Standard or peer-reviewed techniques for the extraction and purification of DNA from unconventional tissues or under unusual field conditions should be prioritised wherever possible, especially if commercial DNA extraction kits are cost-prohibitive or unavailable.⁴⁷

40 See ASTM International Standards E1492 – 05 and E860 – 07 (at <http://www.astm.org/>).

41 Cassidy and Gonzales (n 3) 1458; Sabrina N McGraw, Shamus P Keeler and Jane E Huffman, 'Forensic DNA Analysis of Wildlife Evidence' in Jane E Huffman and John R Wallace (eds), *Wildlife Forensics: Methods and Applications* (2012) 253, 255.

42 McGraw, Keeler and Huffman (n 41) 255.

43 Moore and Kornfield (n 1) 214.

44 Ibid 213.

45 Iyengar (n 3) 195 – 196; see also Jason Byrd and Lerah Sutton, 'Defining a Crime Scene and Physical Evidence Collection' in Jane E Huffman and John R Wallace (eds), *Wildlife Forensics: Methods and Applications* (2012) 51, 58; Cassidy and Gonzales (n 3) 1458.

46 McGraw, Keeler and Huffman (n 41) 259 – 260.

47 Ibid 253, 254 – 255, 266.

2. Development of method, reference data and validation

Because of the breadth of wildlife that may need to be profiled or categorised, and the reactionary nature of forensic science, scientists must often develop their own specialised tests to answer the investigative question posed.⁴⁸

Broadly speaking, to assign an unknown sample to a taxon, the goal is to find genetic markers that are consistently found within that taxon, but generally not found in the DNA of other taxa. This is done by aligning and comparing reference DNA samples with the support of specialised software.⁴⁹ From here it may be inferred, based on the completeness of the reference data, how likely it is that the unknown sample has the identified genetic marker by chance. It is difficult to calculate the statistical significance of a match if the frequency of the genetic marker within the taxon is inferred from a small reference population.⁵⁰ This issue is compounded where a taxon is endangered, since the compilation of a large and complete database is hindered by sparsity of the population, laws restricting access to habitats and preventing the extraction of samples, and arduous permit requirements.⁵¹ Specimens listed in the *CITES* Appendices additionally require import and export permits where they need to be transported internationally between States Parties.⁵²

The data ideally should be from as many known samples of the relevant taxon and any closely related taxa as possible. Practitioners may have to collect this data themselves, unless the relevant genetic markers can be found in published research or public databases.⁵³ Although databases should be treated with caution where contributions are unregulated, they can provide comprehensive reference data which improves the certainty of conclusions.⁵⁴ The reference population data used should be cited and

48 Linacre and Tobe (n 3) 9.

49 Ibid 127.

50 Kidder (n 7) 415; Cassidy and Gonzales (n 3) 1456.

51 Moore and Kornfield (n 1) 204.

52 *CITES*, arts III, IV, V.

53 See for example GenBank (<http://www.ncbi.nlm.nih.gov/genbank/>), Barcode of Life (BOL; <http://www.barcodeoflife.org/>), FishPopTrace (<http://fishpoptrace.jrc.ec.europa.eu/>), FishTrace (<http://www.fishtrace.org/>), and DNA Surveillance (<http://www.cebl.auckland.ac.nz/9000/>).

54 McGraw, Keeler and Huffman (n 41) 264; Budowle et al (n 3) 299.

publicly available, and any estimates (eg about the rate of inbreeding or mutation) should be disclosed.⁵⁵

Whenever a new set of reference data is developed, it must be validated.⁵⁶ Validation is the process of testing a new method or set of markers to evaluate their effectiveness at producing the correct result; ie, how often using that methodology will correctly identify a sample as a part of a given taxon. Validation may include: 'sensitivity, specificity, reproducibility, precision, accuracy, testing the parameters of a method, and analysing samples (mock or nonprobative) commensurate with the intentions for use'.⁵⁷ This is especially true given that the majority of wildlife DNA barcoding occurs in an academic environment, so methods and reference data must be carefully reviewed prior to use in casework.

3. Reporting and testimony

After completing an analysis using a validated method, and having followed proper forensic practise, the process and findings should be compiled into a final report along with detailed records of evidence chain of custody, tamper-avoidance procedures, shipping and receiving documentation, relevant emails and phone calls, images, events and bench notes. Reports should be as transparent as possible, and include statements concerning practitioner qualifications and experience, methods, materials, protocols, results and conclusions.⁵⁸

Where appropriate, any conclusions should be qualified by statements about the limitations of the method or process and assumptions made in the interpretation of the evidence.⁵⁹ Expert practitioners may additionally be required to conform to legislated reporting formats, including providing a copy of a code of conduct signed prior to beginning any casework, depending on the jurisdiction in which they present their evidence.⁶⁰

⁵⁵ Budowle et al (n 3) 298.

⁵⁶ Ibid 295 – 299; McGraw, Keeler and Huffman (n 41) 265.

⁵⁷ Budowle et al (n 3) 299.

⁵⁸ Moore and Kornfield (n 1) 225 – 226.

⁵⁹ Budowle et al (n 3) 300.

⁶⁰ See, for example, *Supreme Court Rules 1970* (NSW) pt 75 r 3(j); *Uniform Civil Procedure Rules 2005* sch 7.

Estimates of accuracy provided by forensic experts should be quantitative in relation to the particular taxon being tested.⁶¹ Ie, the expert should frame their conclusions as an estimate of how likely it is that the sample in fact originated from a particular taxon, rather than independently identifying its most likely source.⁶² Calculating error and match probability is more difficult in DNA barcoding for taxonomic purposes than DNA profiling, since it involves an assessment of an entire taxon rather than two individuals.⁶³ Because the expert must frame his or her finding in this way, he or she must take care to avoid fallacious statements of probability.⁶⁴ This is a particular concern in the context of DNA barcoding due to its high degree of theoretical, but not necessarily practical certainty. Where an expert does not take into account the risk of human or methodological error, random match probabilities, et cetera in calculations of probability, his or her conclusion may be represented to the court as far more certain than it is in reality.⁶⁵ Ideally, reports should be reviewed by another knowledgeable party prior to submission and should also be made available to opposing counsel upon request.⁶⁶

In addition to submitting a report, practitioners may also be required to testify in court, especially since wildlife DNA forensics is a relatively seldom-used science, with fewer documented protocols that may be authoritatively cited to in a written report. Practitioners should therefore be trained in expert witness testimony, and expect to be called to give oral evidence having prepared and submitted a report.⁶⁷

61 Robert Ogden, 'DNA Applications and Implementation', in Jane E Huffman & John R Wallace (eds), *Wildlife Forensics: Methods and Applications* (2012) 271, 278.

62 Moore and Kornfield (n 1) 278.

63 Ibid 226.

64 Budowle et al (n 3) 298 – 299; for an example of a common fallacious statement, see *R v Doherty and Adams* (1997) 1 Cr App R 369, 372 – 373.

65 Edmond et al (n 25) 36.

66 Moore and Kornfield (n 1) 209 – 210; for an example, see Linacre and Tobe (n 3) 297, 305, 309.

67 Moore and Kornfield (n 1) 229 – 230.

V. Applications

1. Species identification

In the investigation of wildlife trafficking offences, wildlife DNA testing is most commonly used for species identification.⁶⁸ This relies on isolating and comparing genetic markers which are generally consistently found within a species, but which vary between species.⁶⁹

Its application is relatively widespread because most protected groups of animals are categorised or referred to in legislation at the species level.⁷⁰ Species identification is useful in identifying trafficked products which no longer carry morphologic species traits, such as shark fins⁷¹ and traditional medicines,⁷² or trace evidence left at the scene of a suspected poaching or on a suspect's clothing or gear.⁷³

Another common use of species identification is where a sample is in an immature state. For example, a 2007 case involved a man wearing a specialised vest designed to conceal and smuggle valuable bird eggs out of Australia. After being told by customs that he would be searched, the man slapped his torso several times, destroying all but two of 38 eggs. DNA analysis was able to determine the number and species of bird embryos contained in both the smashed and remaining eggs, since quarantine laws prevented investigators from allowing the remaining eggs to hatch. The DNA laboratory at the Australian Museum found that each of the bird species were protected under Australian law, and the man was convicted.⁷⁴

68 Ogden (n 61) 273.

69 Linacre and Tobe (n 3) 121 – 132.

70 See *CITES*, appendices I, II, III.

71 See, for example, Mahmood Shivji et al, 'Genetic identification of pelagic shark body parts for conservation and trade monitoring' (2002) 16(4) *Conservation Biology* 1036 – 1047.

72 See, for example, Lindsey Peppin et al, 'A DNA based approach for the forensic identification of Asiatic black bear (*Ursus thibetanus*) in a traditional Asian medicine' (2008) 53 *Journal of Forensic Science* 1358 – 1362; Jon Wetton et al, 'An extremely sensitive species-specific ARMs PCR test for the presence of tiger bone DNA' (2004) 140 *Forensic Science International* 139 – 145.

73 Ogden (n 61) 273.

74 'Wildlife Forensics', *Catalyst* (Australian Broadcasting Corporation (ABC) Radio, 25 October 2007, presenter: Jonica Newby) <<https://www.abc.net.au/catalyst/stories/s2069466.htm>>.

2. Origin

In some cases, and for some offences, it is necessary to identify the geographic location from which a sample originates. This is because legislation adheres to political boundaries where a species may not; ie, a species may be distributed across multiple regions, countries or fishing zones, but only be protected by law in some.⁷⁵ The method for population assignment is approximately the same as species identification: the unknown sample's DNA profile is assigned to a population if it contains genetic markers frequently observed within only one population.⁷⁶

This method is heavily dependent on the completeness of the reference population, since populations are less likely to be defined by discrete genetic differences than species.⁷⁷ It also requires a high degree of genetic variation between geographically distinct populations, and reference data from each potential source population.⁷⁸ For these reasons, it may be difficult to carry out this procedure where a large number of populations exist, or where there is significant inter-population breeding.⁷⁹ Endangered species are more likely to have small and inbred populations.⁸⁰ If, on the other hand, an entire species has been well documented in a database, the use of DNA for population assignment can lead to successful prosecutions, as for example reports involving cases of illegal salmon fishing show.⁸¹

⁷⁵ Ogden (n 61) 275.

⁷⁶ Ibid 278 – 279.

⁷⁷ Ibid 275.

⁷⁸ Ibid 277 – 278; for examples see: Lora Ghobrial et al, 'Tracing the origins of rescued chimpanzees reveals widespread chimpanzee hunting in Cameroon' (2010) 10 *BMC Ecology* 2; Samuel K Wasser et al, 'Assigning African elephant DNA to geographic region of origin: Applications to the ivory trade' (2004) 101(41) *Proceedings of the National Academy of Sciences of the United States of America* 14847 – 14852.

⁷⁹ McGraw, Keeler and Huffman (n 41) 263.

⁸⁰ Kidder (n 7) 407, 415.

⁸¹ Ruth E Withler et al, 'Forensic DNA analysis of Pacific salmonid samples for species and stock identification' (2004) 69 *Environmental Biology of Fishes* 275, 283 – 4; Lisa W Seeb et al, 'Development of a standardized DNA database for Chinook salmon' (2007) 32 *Fisheries* 540, 549.

3. Identification of individuals

Although less common in wildlife and forest crime investigations, in some cases, it may be possible or necessary to exclude or identify a specific animal as the source of a DNA sample found at a crime scene. This may be the case, for instance, where a seized tiger hide must be traced to the carcass of a tiger killed at a zoo,⁸² or a poached animal carcass must be linked to meat found in a suspect's vehicle or trophy in his or her home. Individual assignment can also help determine exactly how many animals are involved where it is unclear (eg, where a number of detached shark fins are seized).⁸³

Individual identification, or DNA profiling, relies on genetic markers that have a high level of variability even within a given species or population, and are thus likely to differ between individuals.⁸⁴ This technique is effective to determine that two samples are not from the same individual where they produce different DNA profiles; however, where two samples produce the same profile, this is only a suggestion that they originate from the same individual. The possibility of closely related samples, especially within inbred populations, may be difficult to displace in some cases.

Individual identification is also used for indexing both protected and non-protected animals, mostly in small populations, to pre-emptively track poached animals or authenticate legal animal products.⁸⁵ The latter works by registering all legal specimens as a means to identify illegal samples and has been demonstrated in Norway, at least theoretically, for common minke whales.⁸⁶

82 See Sandeep Kumar Gupta et al, 'Establishing the identity of the massacred tigress in a case of wildlife trafficking' (2011) 5 *Forensic Science International: Genetics* 74, 75.

83 McGraw, Keeler and Huffman (n 41) 262.

84 Ogden (n 61) 279.

85 Ogden (n 61) 279 – 280; Per Palsbøll et al, 'DNA Registers of Legally Obtained Wildlife and Derived Products as Means to Identify Illegal Takes' (2006) 20(4) *Conservation Biology* 1284, 1292; Carolyn J Hogg et al, 'Stopping the spin cycle: genetics and bio-banking as a tool for addressing the laundering of illegally caught wildlife as "captive-bred"' (2018) 10(2) *Conservation Genetics Resources* 237, 244 – 5.

86 Palsbøll et al (n 85) 1284; see also *CITES*, appendices I and II.

4. Other applications

In addition to parallel markets, such as when only captive-bred specimens can be legally traded, some species are allowed to be possessed or traded only in certain quantities. This opens up issues where a suspect may claim that some of the specimens in his or her possession are the offspring of a legally obtained specimen, effectively laundering wild-caught animals. Because DNA is directly inherited from the parents, this type of analysis can be done with effective certainty and without a reference population.⁸⁷ If approximately half of the genetic markers in the alleged offspring are not shared by the alleged parent, this will generally dispel the claim, subject to the probability of a rare mutation event.⁸⁸

Some legislation protecting wildlife is sex-specific, for instance the poaching of female pheasants in South Korea.⁸⁹ Where sexing cannot be done by visual means due to decomposition or processing, immature specimens, or where sex organs are internal (such as in elephants), genetic markers specific to Y-chromosomes can indicate if the specimen is male.⁹⁰

VI. Challenges

In addition to more general issues facing wildlife DNA forensics briefly mentioned above, there are some practical issues relating to the forensic standards increasingly expected by courts.⁹¹ These issues may hinder the use of wildlife DNA forensics in the investigation of wildlife trafficking offences, or else expose experts to challenge in court where they are not properly accounted for, or adequately avoided, prior to testimony.

⁸⁷ Ogden (n 61) 281.

⁸⁸ Ibid.

⁸⁹ Junghwa An et al, 'A molecular genetic approach for species identification of mammals and sex determination of birds in a forensic case from South Korea' (2007) 167(1) *Forensic Science International* 59, 59.

⁹⁰ McGraw, Keeler and Huffman (n 41) 261.

⁹¹ Ogden (n 61) 272.

1. Evidencing scientific rigour

1.1. Pre-trial protocols and quality management

As outlined in Part III, the chief reason for the legal scrutiny under which expert witnesses are placed is the subjective way that experts form opinions. However, this can be limited if experts can show that they have followed a pre-defined method which has been validated and remains susceptible to objective assessment.⁹² Where an expert has not followed a documented or recommended procedure in the preparation of evidence, a question may arise as to the integrity of the test itself and the interpretation of the results.

For this reason, it is also important that laboratories undertaking wildlife DNA forensics have demonstrable quality assurance and quality control procedures, which monitor all operational and analytical procedures, training exercises, reporting and review of results.⁹³ In short, quality assurance aims to prevent errors, or else identify them before they are published.⁹⁴ A lack in proper quality assurance and quality control mechanisms may lead to a lack of confidence in the results produced, which in turn may render the evidence weak or inadmissible.⁹⁵ General quality assurance standards may be provided by accreditation requirements. For example, laboratories can only become accredited under the gold-standard 'ISO-17025' by the International Organization for Standardization if they are demonstrably in compliance with prescribed quality management standards.

1.2. Certification and accreditation

In its seminal 2009 report on strengthening forensic sciences, the United States National Research Council stated that

laboratory accreditation and individual certification of forensic science professionals should be mandatory, and all forensic science professionals should have access to a

⁹² United States, President's Council of Advisors on Science and Technology (n 28) 75 – 81.

⁹³ Moore and Kornfield (n 1) 202.

⁹⁴ Ogden (n 12) 174.

⁹⁵ Budowle et al (n 3) 295 – 296.

certification process. ... No person (public or private) should be allowed to practice in a forensic science discipline or testify as a forensic science professional without certification.⁹⁶

This is bolstered by evidence that external qualifications and objective standards are a more meaningful indication of competency because they entail transparency.⁹⁷ However, accreditation and certification are uniquely difficult to obtain for laboratories and scientists who perform wildlife DNA forensics, especially those with necessary expertise but who typically only perform research.⁹⁸ Acquiring internationally-recognised accreditation (such as ISO-17025) is expensive, arduous and not typically done by university or multi-use laboratories,⁹⁹ although it is certainly attainable.¹⁰⁰

Certification of individual practitioners is more difficult, since the diverse range of specialties under the umbrella of wildlife DNA forensics is spread over few practitioners.¹⁰¹ Additionally, certification is only a useful indication of professional competence where there is a pre-defined and thorough assessment process; otherwise, it may be vulnerable to legal scrutiny.¹⁰² Currently, the only body that performs individual certification for wildlife forensic practitioners is the Society for Wildlife Forensic Science (SWFS), and currently only in the United States.

Demonstrable training also falls in line with many expert witness provisions,¹⁰³ although as a measure of competency it is not sustainable for very long after it is completed.¹⁰⁴ Moreover, there is no specific training that practitioners can undergo to become qualified as wildlife forensic

96 Committee on Identifying the Needs of the Forensic Science Community, cited in United States, National Research Council (n 19) 25, 195 – 200.

97 Edward K Cheng and G Alexander Nunn, 'Beyond the Witness: Bringing A Process Perspective to Modern Evidence Law' (2019) 97(6) *Texas Law Review* 1077, 1115 – 6.

98 Ogden (n 12) 175.

99 Linacre and Tobe (n 3) 15.

100 Edgard O Espinoza et al, 'The Future of Wildlife Forensic Science' in Jane E Huffman and John R Wallace (eds), *Wildlife Forensics: Methods and Applications* (2012) 343, 354.

101 Ibid 354 – 355.

102 Rebecca N Johnson, Linzi Wilson-Wilde and Adrian Linacre, 'Current and future directions of DNA in wildlife forensic science' (2014) 10 *Forensic Science International: Genetics* 1, 9.

103 See, for example, *Evidence Act* (Cth) s 79.

104 Linacre and Tobe (n 3) 16.

scientists.¹⁰⁵ Perhaps more meaningful to a current assessment of competency is the possibility for practitioners to present their ability through proficiency testing results. However, because it would be unrealistic to develop a proficiency test for every taxon that wildlife DNA forensics encompasses, very few such tests are currently available. Publication and presentation of peer-reviewed research within wildlife DNA forensics is often the only available means to demonstrate competency.¹⁰⁶

2. Funding

Governments in both developing and developed countries appear to be unwilling to commit to funding wildlife trafficking reduction efforts.¹⁰⁷ This is compounded by that fact that casework in wildlife DNA forensics is relatively infrequent, especially where it is specialised, which drives up the cost of developing and maintaining wildlife forensic facilities and personnel significantly.¹⁰⁸ Additionally, and unlike its human counterpart, the majority of wildlife DNA forensics has very little commercial value.¹⁰⁹ Because of this high service cost and lack of commercial viability, government funding is important if laboratories are to operate at satisfactory standards and trained staff are to remain fairly compensated, since low salaries within forensic sciences open up the possibility of corruption and incompetence.

VII. The way ahead

Many of the above challenges could, theoretically, be avoided if all wildlife forensic testing was outsourced to a single, trusted laboratory with

¹⁰⁵ Ogden (n 12) 176.

¹⁰⁶ Linacre and Tobe (n 3) 16.

¹⁰⁷ Anita Sundari Akella and Crawford Allan, *Dismantling Wildlife Crime: Executive Summary* (2012) 8; Melanie Wellsmith, 'Wildlife Crime: The Problems of Enforcement' (2011) 17 *European Journal on Criminal Policy and Research* 125, 137.

¹⁰⁸ Ogden (n 12) 174.

¹⁰⁹ Ibid.

selective staff. This would also help the ancillary issue that many countries who are most affected by wildlife trafficking are the least equipped to effectively use wildlife DNA forensics.¹¹⁰ The United Nations Office on Drugs and Crime (UNODC) has stated that

many countries lack appropriate scientific, enforcement and judicial structures required to support the production and use of forensic evidence. Until these are available, the establishment of a wildlife forensic facility would be premature and have little or no impact. Furthermore, there is insufficient casework demand at present to justify a lab in every country.¹¹¹

The US Fish and Wildlife Service (USFWS) Forensic Laboratory offered over a decade ago to take on any forensic analyses of wildlife trafficking evidence related to the enforcement of *CITES* internationally, free of charge.¹¹² The USFWS laboratory maintains an ISO-17025 accreditation, and its scientists have testified in court and successfully resisted legal challenge, at least in the United States, based on their ‘extensive academic training and experience’.¹¹³

Despite this, their offer does not appear to have been universally taken up, as most wildlife forensics takes place in domestic university or commercial laboratories.¹¹⁴ This may be because countries wish to develop their own skills in wildlife forensics, or are unwilling to reveal deficiencies in their own practises or share resources internationally. It may also be that, due to the nature of wildlife forensics, sometimes investigators will encounter an unconventional sample which requires testing by a specialist academic or research laboratory that does not otherwise adhere to forensic standards.¹¹⁵ Hence, the laborious and expensive practise of wildlife DNA forensics is still dispersed across several laboratories in several countries.

In 2015, UNODC conducted a confidential survey reviewing the capacity of laboratories undergoing forensic wildlife services worldwide.¹¹⁶ This review

¹¹⁰ Robert Ogden and Jen Mailley, *A review of wildlife forensic science and laboratory capacity to support the implementation and enforcement of CITES* (2015) 30.

¹¹¹ Ibid 28.

¹¹² Ogden (n 12) 178.

¹¹³ *U.S. v Kapp* 419 F.3d 666, 673–675.

¹¹⁴ Ogden (n 12) 174.

¹¹⁵ Linacre and Tobe (n 3) 14.

¹¹⁶ Ogden and Mailley (n 110) i–ii.

found that, of the laboratories that had undertaken diagnostic casework, only some were operating in line with internationally accepted forensic standards. For instance, only 44 % of laboratories surveyed indicated that they operated to a minimum quality assurance standard, and only 31 % to an external standard.¹¹⁷

This review was revised in 2017 in order to develop and publish a directory of laboratories that are willing and able to conduct wildlife forensics at the requisite standard.¹¹⁸ The pool of invited participants included those who had participated in the previous survey, plus additional laboratories who had not. Of the laboratories surveyed, 66 % reported that they were operating to a minimum quality assurance standard, and 35 % were subject to external audit. In addition, 68 % of laboratories indicated an intention to improve quality assurance standards over the next three years.

This increase in laboratories claiming to operate at satisfactory quality assurance standards in just a few years is encouraging, and may be indicative of a general positive inclination within wildlife forensics towards more rigorous scientific standards. Given the momentum in evidence law towards a higher standard of scrutiny, it is in the interest of wildlife DNA forensics, and indeed wildlife crime reduction efforts generally, to move towards an externally demonstrable standard of laboratory practise.

VIII. Conclusion

The importance of reducing wildlife trafficking has been enunciated elsewhere, and comprehensively so.¹¹⁹ Implications such as the extinction of unique and ecologically significant species and the disruption of delicate and vital ecosystems are well documented. Despite this, the prevention of wildlife trafficking is not prioritised to the extent that the seriousness of these consequences suggest it ought to be. The reality is

¹¹⁷ Ibid 21 – 23.

¹¹⁸ Robert Ogden and Simon Dures, 'Development of an electronic directory of laboratories that conform to a defined minimum standard for conducting wildlife forensic testing' (2017) 23.

¹¹⁹ See, for example Huffman and Wallace (eds) (n 3); Cassidy and Gonzales (n 3) 1454; Iyengar (n 3) 195; Linacre and Tobe (n 3); Budowle et al (n 3) 119.

that efforts to reduce wildlife trafficking are often underdeveloped and underfunded. It is therefore important that the efforts currently in place are strengthened and supported as much as possible.

Regardless of jurisdiction, legislation that catches wildlife trafficking offenders has at least one thing in common: the animal affected by the actions of the perpetrator must belong to a pre-defined group which merits protection. Proving that this is the case is not always straightforward, to the extent that sometimes the only means of proving that the trafficked product or poached animal is protected is by using sciences such as wildlife DNA forensics.¹²⁰ Wildlife DNA forensics has the potential to play a vital role in the successful prosecution of wildlife trafficking offenders where other methods of profiling and taxonomy are, for one reason or another, ineffective.

Wildlife DNA forensics ought to respond to the needs of law enforcement by maintaining and strengthening validity in the courtroom. This can most effectively be done by reference to external standards that speak to both the foundational validity and applied accuracy of the methods used by practitioners. While some laboratories are already operating at a remarkably high standard for a generally under-resourced and immature field, some may run into issues with evidencing the scientific rigour increasingly required in court.

Looking at the literature emerging from this area,¹²¹ in conjunction with the survey results referred to in Part VII, it may be the case that wildlife DNA forensics will continue to improve and mature into a reliable and reputable forensic science on its own. However, without discounting or distrusting the passionate voices within this scientific community who are aware of the developments that need to be made, it is nevertheless important that improvement does not occur in a vacuum. If the goal is to enforce wildlife trafficking legislation, and ultimately to reduce wildlife trafficking in general, then the focus of wildlife DNA forensics should not only be on good science; it should be on demonstrably good science.

¹²⁰ Peter Cobb, cited in White (n 4) 2.

¹²¹ United States, President's Council of Advisors on Science and Technology (n 28); United States, National Research Council (n 19).

Bibliography

- Adam, Craig, *Forensic Evidence in Court: Evaluation and Scientific Opinion*, Chichester: John Wiley & Sons, 2016
- Akella, Anita Sundari and Crawford Allan, *Dismantling Wildlife Crime: Executive Summary*, Gland: WWF and TRAFFIC, November 2012
- An, Junghwa et al, 'A molecular genetic approach for species identification of mammals and sex determination of birds in a forensic case from South Korea' (2007) 167(1) *Forensic Science International* 59
- Budowle, Bruce et al 'Recommendations for animal DNA forensic and identity testing' (2005) 119(5) *International Journal of Legal Medicine* 119
- Byrd, Jason and Lerah Sutton, 'Defining a Crime Scene and Physical Evidence Collection' in Jane E Huffman and John R Wallace (eds), *Wildlife Forensics: Methods and Applications*, Hoboken, NJ: John Wiley & Sons, 2012, 51
- Campbell Moriarty, Jane and Michael J Saks, 'Forensic Science: Grand Goals, Tragic Flaws, and Judicial Gatekeeping' (2006) 44 *Judges Journal* 16
- Cashman, Katherine, *Lawyers and DNA: Understanding and Challenging the Evidence*, PhD Thesis, The University of Tasmania, 2017
- Cassidy, Brandt and Robert Gonzales, 'DNA Testing in Animal Forensics' (2005) 69 *Journal of Wildlife Management* 1454
- Cheng, Edward K and G Alexander Nunn, 'Beyond the Witness: Bringing A Process Perspective to Modern Evidence Law' (2019) 97(6) *Texas Law Review* 1077
- Chin, Jason M, 'Abbey Road: The (Ongoing) Journey to Reliable Expert Evidence' (2018) 9(3) *Canadian Bar Review* 422
- Chin, Jason M, 'Psychological science's replicability crisis and what it means for science in the courtroom' (2014) 20 *Psychology, Public Policy, and Law* 225
- Edmond, Gary et al, 'Admissibility Compared: The Reception of Incriminating Expert Evidence (i. e., Forensic Science) in Four Adversarial Jurisdictions' (2013) 3 *University of Denver Criminal Law Review* 31
- Edmond, Gary, 'Legal versus Non-Legal Approaches to Forensic Science Evidence' (2016) 20 *International Journal of Evidence and Proof* 3
- Edmond, Gary, 'What Lawyers Should Know About Forensic Sciences' (2015) 36 *Adelaide Law Review* 33

- Espinoza, Edgard O et al, 'The Future of Wildlife Forensic Science' in Jane E Huffman and John R Wallace (eds), *Wildlife Forensics: Methods and Applications*, Hoboken, NJ: John Wiley & Sons, 2012, 343
- Ghobrial, Lora et al, 'Tracing the origins of rescued chimpanzees reveals widespread chimpanzee hunting in Cameroon' (2010) 10 *BMC Ecology* [not paginated]
- Goss, Samuel and Jennifer Mnookin, 'Expert Information and Expert Evidence: A Preliminary Taxonomy' (2003) 34 *Seton Hall Law Review* 148
- Gupta, Sandeep Kumar et al, 'Establishing the identity of the massacred tigress in a case of wildlife trafficking' (2011) 5 *Forensic Science International: Genetics* 74
- Hogg, Carolyn J et al, 'Stopping the spin cycle: genetics and bio-banking as a tool for addressing the laundering of illegally caught wildlife as "captive-bred"' (2018) 10(2) *Conservation Genetics Resources* 237
- Huffman, Jane E and John R Wallace (eds), *Wildlife Forensics: Methods and Applications*, Hoboken, NJ: John Wiley & Sons, 2012
- IUCN, 'IUCN Red List of Threatened Species' (Web page, undated) <https://www.iucn.org/resources/conservation-tools/iucn-red-list-threatened-species#RL_index>
- Iyengar, Arati, 'Forensic DNA analysis for animal protection and biodiversity conservation: a review' (2014) 22 *Journal for Nature Conservation* 195
- Johnson, Rebecca N, 'The use of DNA identification in prosecuting wildlife-traffickers in Australia: do the penalties fit the crimes?' (2010) 6 *Forensic Science, Medicine, and Pathology* 211
- Johnson, Rebecca N, Linzi Wilson-Wilde and Adrian Linacre, 'Current and future directions of DNA in wildlife forensic science' (2014) 10 *Forensic Science International: Genetics* 1
- Kidder, Melissa, 'Human DNA v. Non-Human DNA: A Look at the General Admissibility of Non-Human DNA in the Courts' (2009) 35 *Ohio Northern University Law Review* 397
- Linacre, Adrian and Shanan Tobe, *Wildlife DNA Analysis: Applications in Forensic Science*, Chichester: Wiley-Blackwell, 2013
- Martire, Kristy and Gary Edmond, 'Rethinking Expert Opinion Evidence' (2017) 40 *Melbourne University Law Review* 967
- McGraw, Sabrina N, Shamus P Keeler and Jane E Huffman, 'Forensic DNA Analysis of Wildlife Evidence' in Jane E Huffman and John R Wallace (eds),

- Wildlife Forensics: Methods and Applications*, Hoboken, NJ: John Wiley & Sons, 2012, 253
- Moore, M Katherine and Irving L Kornfield, 'Best Practices in Wildlife Forensic DNA' in Jane E Huffman and John R Wallace (eds), *Wildlife Forensics: Methods and Applications*, Hoboken, NJ: John Wiley & Sons, 2012, 202
- Ogden, Robert and Jen Mailley, *A review of wildlife forensic science and laboratory capacity to support the implementation and enforcement of CITES*, Vienna and Geneva: UNODCA and CITES Secretariat, 2015
- Ogden, Robert and Simon Dures, *Development of an electronic directory of laboratories that conform to a defined minimum standard for conducting wildlife forensic testing*, Vienna and Geneva: UNODCA and CITES Secretariat, 2017
- Ogden, Robert, 'DNA Applications and Implementation', in Jane E. Huffman and John R. Wallace (eds), *Wildlife Forensics: Methods and Applications*, Hoboken, NJ: John Wiley & Sons, 2012, 271
- Ogden, Robert, 'Forensic science, genetics and wildlife biology: getting the right mix for a wildlife DNA forensics lab' (2010) 6 *Forensic Science, Medicine and Pathology* 172
- Palsbøll, Per et al, 'DNA Registers of Legally Obtained Wildlife and Derived Products as Means to Identify Illegal Takes' (2006) 20(4) *Conservation Biology* 1284
- Peppin, Lindsey et al, 'A DNA based approach for the forensic identification of Asiatic black bear (*Ursus thibetanus*) in a traditional Asian medicine' (2008) 53 *Journal of Forensic Science* 1358
- Ramadan, Hassan and Nabih Baeshen, 'Biological identifications through DNA barcodes' in Gbolagade Akeem Lameed (ed), *Biodiversity Conservation and Utilization in a Diverse World*, Rijeka: IntechOpen, 2012, 109
- Searston, Rachel and Jason Chin, 'The legal and scientific challenge of black box expertise' (2019) 38(2) *University of Queensland Law Journal* 238
- Seeb, Lisa W, 'Development of a standardized DNA database for Chinook salmon' (2007) 32 *Fisheries* 540
- Semikhodskii, Andrei, *Dealing with DNA Evidence: A Legal Guide*, New York, NY: Routledge-Cavendish, 2007
- Sensabaugh, George and D H Kaye, 'Non-Human DNA Evidence' (1998) 39(1) *Jurimetrics* 1

- Shivji, Mahmood et al, 'Genetic identification of pelagic shark body parts for conservation and trade monitoring' (2002) 16(4) *Conservation Biology* 1036
- Tobe, Shanan, James Govan and Lindsey Welch, 'Tackling poaching: Recovery of human DNA profiles from deer remains' (2011) 3 *Forensic Science International: Genetics Supplement Series* e265
- United States, National Research Council, *Strengthening Forensic Science in the United States: A Path Forward*, Washington, DC: National Academies Press, 2009
- United States, President's Council of Advisors on Science and Technology, '*Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods*, Report to the President, Washington, DC: Executive Office of the President of the United States, September 2016
- UNODC, *Wildlife and Forest Crime Analytic Toolkit*, New York, NY: United Nations, rev ed, 2012
- Wallace, John R and Jill C Ross, 'The Application of Forensic Science to Wildlife Evidence' in Jane E. Huffman and John R. Wallace (eds), *Wildlife Forensics: Methods and Applications*, Hoboken, NJ: John Wiley & Sons, 2012, 35
- Wasser, Samuel K et al, 'Assigning African elephant DNA to geographic region of origin: Applications to the ivory trade' (2004) 101(41) *Proceedings of the National Academy of Sciences of the United States of America* 14847
- Wellsmith, Melanie, 'Wildlife Crime: The Problems of Enforcement' (2011) 17 *European Journal on Criminal Policy and Research* 125
- Wetton, Jon et al, 'An extremely sensitive species-specific ARMs PCR test for the presence of tiger bone DNA' (2004) 140 *Forensic Science International* 139
- White, Peter (ed), *Crime Scene to Court – The Essentials of Forensic Science*, London: Royal Society of Chemistry, 1998
- Withler, Ruth E et al, 'Forensic DNA analysis of Pacific salmonid samples for species and stock identification' (2004) 69 *Environmental Biology of Fishes* 275
- Wyatt, Tanya, *Wildlife Trafficking: A Deconstruction of the Crime, the Victims and the Offenders*, Basingstoke: Palgrave Macmillan, 2013
- 'Wildlife Forensics', *Catalyst* (Australian Broadcasting Corporation (ABC) Radio, 25 October 2007, presenter: Jonica Newby) <<https://www.abc.net.au/catalyst/stories/s2069466.htm>>

Judicial decisions

Daubert v Merrell Dow Pharmaceuticals Inc 125 L Ed 2d 469, 595

R v Abbey (2009) ONCA [62]–[70]

R v Doheny and Adams (1997) 1 Cr App R 369

R v Mohan [1994] 2 SCR 9

U.S. v Kapp 419 F.3d 666

Chapter Twelve

Wildlife Trafficking in Australian Criminal Law

JACK PURTILL

Wildlife trafficking represents a grave threat to worldwide biodiversity. International frameworks have been established with the objective of mitigating this threat by way of regulating the trade of certain endangered or otherwise protected species. In order to augment the efficacy of such initiatives, ratification and enforcement at the domestic level are essential. In Australia, criminalisation of wildlife trafficking is achieved through the *Environment Protection and Biodiversity Conservation Act 1999* (Cth), as well as through localised legislation at the State and Territory levels. This chapter explores the criminal offences currently in operation in Australia that are relevant to wildlife trafficking, and evaluates some avenues of reform that have been proposed.

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I. Introduction

Wildlife trafficking has been widely acknowledged as a global threat to biodiversity and to the conservation of species,¹ especially those species that are at risk of endangerment or extinction. Wildlife trafficking carries a particularly negative influence on geographic locations with a high concentration of unique wildlife populations, such as Australia.² In seeking to mitigate the impact of the illegal trade—or ideally prevent wildlife trafficking altogether—criminalisation of conduct that involves or facilitates this trafficking is an essential step to be taken towards solving this multifaceted problem.

This chapter provides an overview of the criminal offences and surrounding provisions relevant to wildlife trafficking into and out of Australia, as well as within the country between the varying, and at times conflicting, State and Territory jurisdictions. After examining the relevant legislative provisions at these two levels, challenges and deficiencies obstructing the efficacious operation of these laws will be made apparent. Finally, several avenues of reform expressed by commentators will be evaluated with a view to improving the effectiveness of Australia's criminal laws concerning wildlife trafficking into, out of, and within the country.

At the national level, it will be proposed that, despite Australia's relatively sound national legislative framework to combat wildlife trafficking, low levels of understanding and priority as to these criminal laws, as well as

1 UN General Assembly, *Tackling illicit trafficking in wildlife*, UN Doc A/71/L.88 (5 September 2017).

2 Erika Alacs and Arthur Georges, 'Wildlife across our borders: a review of the illegal trade in Australia' (2008) 40(2) *Australian Journal of Forensic Sciences* 147, 147.

inadequate law enforcement responses to modern illicit marketplaces, namely the internet, hinder the fight against trafficking in fauna and flora into and out of Australia. Furthermore, the multitude of environment and conservation statutes across the States and Territories have resulted in an overly complex network of legislative measures. Adding to this complexity, conflicting laws in different jurisdictions often result in inadequate punitive responses, especially with regard to sentencing of perpetrators whose offending crosses State or Territory borders.

There is a relative dearth of literature directly addressing criminal laws concerning wildlife trafficking in Australia. This area has only been explored modestly in the past, and scholarly commentary has been somewhat limited hitherto. Moreover, the existing literature is rather circular, often referring only to the same few available publications, most of which canvas virtually identical subject matter.³ In light of this, this chapter seeks to analyse the commentary critically alongside the legislation. Recommendations for law reform articulated in the past, especially at the State and Territory level, will also be critically examined.

II. Settings

1. Background and development

Over 80 percent of Australia's flora and fauna are endemic⁴ and the country has the highest recorded extinction rate in the world.⁵ For these reasons, it would be expected that Australia greatly values its native wildlife. Wildlife trafficking is, however, not afforded a high degree of priority in Australian criminal law.⁶ While the same can be said about some foreign

3 See *ibid*; Samantha Bricknell, *Environmental Crime in Australia*, Australian Institute of Criminology, Research and Public Policy Series No 109 (2010) 63; Sherryn Ciavaglia et al, 'Current issues with the Investigation of Wildlife Crime in Australia: Problems and Opportunities for Improvement' (2015) 18 *Journal of International Wildlife Law & Policy* 244, 254.

4 Arthur D Chapman, *Number of Living Species in Australia and the World*, Report for the Australian Biological Resources Study (2nd ed, September 2009) 1.

5 Bricknell (n 3) 63.

6 Ciavaglia et al (n 3) 254.

jurisdictions,⁷ it is nevertheless surprising that criminal offences relating to wildlife trafficking are neither given adequate attention by Australian governments, nor are they implemented to full effect.

The low level of priority afforded to wildlife trafficking, coupled with unavailability or unreliability of data, means that little is known about the true scale of trafficking in fauna and flora in and out of Australia.⁸ While some data canvassing intercepted wildlife specimens and goods does exist,⁹ this alone is not enough to paint a comprehensive picture of the levels and characteristics of the illicit wildlife trade in Australia. Furthermore, it remains challenging, if not impossible, to ascertain whether recorded seizures of wildlife contraband represent a significant portion of trafficked wildlife or whether it is merely the 'tip of the iceberg' and the dark figure much larger.¹⁰ Based on the available literature and the low number of recorded seizures, it is possible that the illicit trade is vibrant and lucrative.¹¹ The apparent lack of routine surveillance of online marketplaces for trafficked wildlife products by Australian law enforcement likely further contributes to the unreliability of data in this area.¹²

Australia is a Party to the *Convention on International Trade in Endangered Species (CITES)* since 1975.¹³ CITES, which is discussed in detail in Chapter Six of this volume, seeks to regulate, and in some instances prohibit, international trade in endangered species of flora and fauna by establishing three appendices that ascribe various levels of trade restrictions, with the ultimate goals of protecting these species and conserving biological diversity. Pursuant to these and other conservation goals, Australia is also signatory to a number of other environmentally-focused international Conventions, including the *Convention on Biological Diversity*, which is the subject of Chapter Seven.¹⁴ A plethora of criminal

7 Greg Warchol, 'The Transnational Illegal Wildlife Trade' (2004) 17(1) *Criminal Justice Studies* 57, 57.

8 Boronia Halstead, *Traffic in flora and fauna*, Australian Institute of Criminology, Trends and issues in crime and criminal justice No 41 (November 1992) 2.

9 See Alacs and Georges (n 2) 151.

10 Ibid.

11 Halstead (n 8) 2.

12 Alacs and Georges (n 2) 151.

13 Opened for signature 3 March 1973, 993 UNTS 243 (entered into force 1 July 1975).

14 Opened for signature 5 June 1992, 1760 UNTS 79 (entered into force 29 December 1993).

offences have been established with the objective of implementing these Conventions effectively into domestic Australian legislation.

2. Legislative settings

Section 51 of the *Australian Constitution* grants the Commonwealth a range of legislative powers and responsibilities. Relevant to the trade in wildlife are the powers concerning trade and commerce with other countries and among the States (s 51(i)) and external affairs (s 51(xxix)). While the powers afforded to the Federal Parliament by the *Australian Constitution* make no express mention of topics such as the environment, fauna and flora, or wildlife, this does not place the topic of wildlife trafficking entirely outside of Commonwealth influence. For example, the Commonwealth may, under its external affairs power, allow or prohibit certain practices or operations in Australia in order to fulfill international obligations.¹⁵ Similarly, and relevantly to *CITES*, the federal parliament may enact legislation pertaining to international trade under s 51(i) of the *Constitution*.

Offences relating to cross-border wildlife trafficking were previously set out in the *Wildlife Protection (Regulation of Exports and Imports) Act 1982* (Cth), which seldom made reference to Australia's international obligations concerning the wildlife traded and contained a rather cumbersome set of offences that were found to be difficult to apply, interpret, and use in actual prosecutions.¹⁶ A comprehensive review of federal environmental laws in 1998 resulted in calls for a major overhaul of the legislative landscape in this area.¹⁷

Most of the obligations arising from *CITES* are now implemented into Australian law within the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (*EPBC Act*).¹⁸ This Act supplanted a number of

¹⁵ Peter M McDermott, 'External Affairs and Treaties – The Founding Fathers' Perspective' (1990) 16(1) *University of Queensland Law Journal* 123, 123.

¹⁶ Revised Explanatory Memorandum, Environment Protection and Biodiversity Conservation Amendment (Wildlife Protection) Bill 2001 (Cth).

¹⁷ James Prest and Susan Downing, *Shades of Green? Proposals to Change Commonwealth Environment Laws*, Parliamentary Library, Research Paper 16 1997 – 98 (23 June 1998) 13.

¹⁸ No 91 of 1999.

earlier statutes, including the *National Parks and Wildlife Conservation Act 1975* (Cth), the *Whale Protection Act 1980* (Cth), the *World Heritage (Properties Conservation) Act 1983* (Cth), the *Endangered Species Protection Act 1992* (Cth), and the *Environment Protection (Impact of Proposals) Act 1974* (Cth). When the *EPBC Act* was first introduced in 1999, it did not contain any of the provisions reflecting *CITES* or the *Convention on Biological Diversity*.

III. Federal offences

1. Environment Protection and Biodiversity Conservation Amendment (Wildlife Protection) Act 2001 (Cth)

Criminal offences pertaining to wildlife trafficking were incorporated into the *EPBC Act* with the *Environment Protection and Biodiversity Conservation Amendment (Wildlife Protection) Act 2001* (Cth). This amendment added Part 13 A to the Act, which concerns the international movement of wildlife specimens.

The Explanatory Memorandum attached to this amendment highlighted several concerns expressed in previous inquiries. Referring to a 1998 Senate inquiry into the 'Commercial Utilisation of Australian Native Wildlife',¹⁹ the Explanatory Memorandum expressed ongoing concern 'about the efficacy and the enforcement of the *Wildlife Protection Act*. For example, it can be very difficult to obtain a conviction for some offences against the *Wildlife Protection Act*'.²⁰ In response to this, the amendment introduced this streamlined framework of offences to supersede those in the *Wildlife Protection Act*.

This amendment simplified the confusing jargon previously used in Australia's wildlife trafficking offences, thereby better aligning them with the core intentions behind *CITES* and other international frameworks such as the *Convention on Biological Diversity*. It also effectively established a

19 Rural and Regional Affairs and Transport Legislation Committee, Submission to the Senate of Australia, *Commercial Utilisation of Australian Native Wildlife* (June 1998).

20 Revised Explanatory Memorandum, Environment Protection and Biodiversity Conservation Amendment (Wildlife Protection) Bill 2001 (Cth) 9.

comprehensive framework that afforded specific offences to those species protected under *CITES*, thus distinguishing them from those offences applicable only to non *CITES*-listed species that are native or otherwise regulated within Australia.

The Explanatory Memorandum further clarified that the bill was being submitted with the objective of more direct and effective fulfilment of Australia's international obligations, stating that better compliance with *CITES* was the primary object of introducing the amended provisions: 'The structure and language of this Division have been deliberately chosen to mirror that of the *CITES* treaty, and therefore appear differently from that of the *Wildlife Protection Act*. This will enhance Australia's capacity to implement its *CITES* obligations.'²¹

For the purposes of this section, certain offences within the *EPBC Act* with similar functions or application are discussed jointly. Additionally, certain non-criminal provisions are highlighted that, while not prescribing offences as such, perform essential peripheral functions that enable the operation of the criminal offences discussed hereafter.

2. Offences under the Environment Protection and Biodiversity Conservation Act 1999 (Cth)

As mentioned above, the *EPBC Act* is Australia's main national environmental law framework and Part 13 A of the Act concerns the international movement of wildlife specimens. This is where Australia's *CITES*-based offences are found. The wildlife trafficking offences prescribed under Part 13 A serve to implement the *CITES* framework in Australia.

Similarly to many other Commonwealth statutes, the *EPBC Act* uses a system of 'penalty units' to assign financial penalties that may be flexible to account for various circumstances such as inflation.²² The current value of one penalty unit is AUD 210; this value will be increased to account for inflation in 2020.²³

²¹ Ibid 3 [emphasis added].

²² *Crimes Act 1914* (Cth) s 4AA(1).

²³ Ibid s 4AA(3).

The maximum penalties prescribed by the wildlife trafficking offences below have been described by scholars such as Tanya Wyatt as severe, and as effectively reflective of the seriousness of the crime type.²⁴ In practice, however, these maximum penalties are hardly ever applied in sentencing.

2.1. Listing of species and general provisions

Section 303CA of the *EPBC Act* mandates the creation and maintenance of a list of protected species that mirrors the *CITES* Appendices and requires that each listed species have a notation attached that further informs its place in the Appendices and its date of addition to the list.

Another important provision at the outset of Part 13 A of the *EPBC Act* is s 303CB, which functions to bolster the preceding provision. Section 303CB(2) grants the Minister for the Environment powers to implement domestic measures stricter than those otherwise afforded by the *CITES* regulations. The Minister may designate that, at the domestic level, the protection of a particular species be treated with a higher degree of stringency than the global *CITES* listings demand, or that non *CITES*-listed species be treated similarly to those that are *CITES*-listed. Importantly, this provision grants the Minister such powers for the purposes of tightening restrictions, not loosening them, so as to ensure that Australia's *CITES* obligations are not undermined by affording an undue amount of discretion over the regulations at a domestic level.

2.2. Illegal import and export offences

Legislative provisions outlawing the unauthorised importing or exporting of certain endangered species are at the crux of Australia's criminal law provisions concerning wildlife trafficking. These offences cover a range of circumstances involving *CITES*-listed species, but also carry out a similar function with regard to native or otherwise regulated species, denoted in the Act as 'regulated specimens'.²⁵ With regard to offences that concern

24 Tanya Wyatt, 'A comparative analysis of wildlife trafficking in Australia, New Zealand and the United Kingdom' (2016) 2(1) *Journal of Trafficking, Organized Crime and Security* 62, 80.

25 *EPBC Act*, s 303DA.

native species, legislators have deliberately sought to mirror the *CITES* provisions, not only to enable a streamlined interpretation of the offences as a whole, but also to foreground that native species are of high priority in Australia, irrespective of their conservation status.²⁶

(a) Sections 303CC & 303DD – Export of *CITES* and regulated native specimens

Sections 303CC and 303DD criminalise the unauthorised export of certain species out of Australia. *CITES* obligations with regard to regulating the export of listed species are met by s 303CC, and s 303DD performs a similar function for regulated native specimens. These two offences are identical in application, and their requisite elements differ only in the species to which they may be applied. Under these sections, a person commits an offence if they export a specimen in a manner that is not authorised by the Act, and if that specimen either belongs to a *CITES*-listed species or is a regulated native specimen.

Exemptions to liability under both of these sections apply if the exporting party has a valid export permit issued under certain other provisions within the Act.²⁷ Likewise, an exemption applies under subs 303CC(5) if the Minister is satisfied that the specimen in question was acquired before the *CITES* regulations applied to it, and has subsequently issued a certificate to that effect.

A further exemption applies under subs 303DD(3) if the specimen is to be exported in accordance with an accredited wildlife trade management plan, and similar exemptions apply under subss 303CC(3) and (4) if the specimen is being exported as part of a registered exchange between scientific organisations. The evidential burden in all of the above situations of exemption lies with the defendant.

Offenders against these sections face maximum penalties of 10 years imprisonment and fines of up to 1 000 penalty units: ss 303CC(1), 303DD(1).

²⁶ Revised Explanatory Memorandum, Environment Protection and Biodiversity Conservation Amendment (Wildlife Protection) Bill 1998.

²⁷ *EPBC Act*, ss 303CG, 303DG, 303GB, 303GC.

(b) Sections 303CD and 303EK – Import of CITES and regulated live specimens

Sections 303CD and 303EK criminalise the unauthorised importation of certain species. Section 303CD specifically addresses *CITES* specimens found in such situations. Section 303EK creates an offence for unauthorised importation of a more specific set of live specimens from outside Australia.

As with the previously discussed export offences, exemptions based on allowable importation under certain permits exist within both of these import provisions.²⁸ An exemption to s 303CD applies if the imported item is a personal or household effect. This exemption is taken from Article VII(3) of the *CITES* regulations. The exemption based on registered scientific exchanges mentioned above is also applicable to this section (s 303CD(5)). A further exemption is applicable if: the specimen in question belongs to *CITES* Appendix II; the specimen is deceased and is not an identified species in any other relevant regulations; the quantity of individual specimens does not exceed any quantitative limits imposed under the *EPBC Act*; the specimen has been transported within the personal baggage of a person entering Australia; and the *CITES* authority of the country from which it has been exported has given permission for its export (s 303CD(4)). The last exemption under this section is applicable if the *CITES* authority of the exporting country is satisfied that the specimen was acquired before its *CITES* listing, and has issued a certificate acknowledging this (s 303CD(6)).

An exemption under s 303EK(2) applies if the specimen imported is an allowable regulated specimen as defined under s 303EB, and a valid permit has been issued.

Persons convicted under these sections may incur penalties of up to 10 years imprisonment, and up to 1 000 penalty units.²⁹

²⁸ Ibid ss 303CG, 303GB, 303GC.

²⁹ Ibid ss 303CD(1), 303EK(1).

(c) Section 303GQ – Imports of specimens contrary to the laws of a foreign country

Section 303GQ criminalises the intentional importation of a specimen from a country where the exportation of that specimen is illegal. It is specified that the law prohibiting the exportation from the exporting country must have a basis in CITES, similarly to Part 13 A of the *EPBC Act*. Unlike offences previously discussed, the ability of this offence to be utilised is entirely dependent on the actions of a body from an international jurisdiction; namely, the relevant *CITES* authority of the exporting country. This offence may only be applied if that body has requested either: the investigation of the offence itself; or assistance in relation to a broader class of offences, of which the offence in question is one (s 303GQ(2)).

The maximum penalty prescribed by this offence is five years imprisonment (s 303GQ(1)).

2.3. Additional offences

(a) Section 303GF – Contravening conditions of a permit

An integral aspect of effective implementation of the *CITES* framework in any domestic setting is the establishment of a valid permit or licensing system. In Australia, contravention or manipulation of such systems constitutes a criminal offence under s 303GF of the *EPBC Act*. General breaches of permit conditions attract penalties of up to 300 penalty units (s 303GQ(1)), whereas breaches involving the sale or release from captivity of a live specimen can incur penalties of up to 600 penalty units (s 303GF(3)). These are offences of strict liability, such that fault elements need not be proven for the elements of the offence.³⁰ In other words, offenders may be found liable so long as actual contravention of a permit condition can be established.

(b) Section 303GN – Possession of illegally imported specimens

Section 303GN takes a further step in implementing *CITES* regulations and the *Convention on Biological Diversity* by criminalising the possession of illegally imported specimens, regardless of whether or not the possessor

³⁰ *Criminal Code (Cth)* s 6.1.

was involved in the importation of the specimen. Eligible specimens may be either *CITES*-listed or regulated live specimens.

Exemptions from liability apply if the specimen was lawfully imported, or if the individual specimen itself was not imported, but it belongs to the progeny of lawfully imported specimens (s 303GN(3)). A subsequent exemption also applies if the defendant has a reasonable excuse (s 303GN(5)). The defendant bears an evidential burden if they seek to rely on any of these exemptions.

Persons convicted under this section face a maximum term of imprisonment of 5 years imprisonment and a fine of up to 1 000 penalty units (s 303GN(2)).

(c) Section 303GP – Cruelty (export or import of animals)

Section 303GP predominantly focuses on the humane treatment of wildlife, which is identified as a distinct objective of this Part within the *EPBC Act* (s 303BA(1)(e)). In order to incur liability under this section, offenders must be found to have exported or imported a live animal in a manner that subjects the animal to cruel treatment (s 303GP(1)(a)). The animal must be either *CITES*-listed, or an otherwise regulated specimen. The offence also mandates a mental element of knowledge, or at least recklessness, as to the cruelty imposed by the circumstances of the export or import. This offence works in tandem with the export and import provisions discussed above,³¹ requiring contravention of one of these provisions in order to apply. *CITES* itself does not mandate or necessarily encourage the inclusion of any such provision.

The penalty for this offence is imprisonment for a maximum of two years (s 303GP(1), (2)).

³¹ *EPBC Act* ss 303CC, 303CD, 303DD, 303EK.

3. Offences relevant to wildlife trafficking within other national legislative instruments

3.1. Biosecurity Act 2015 (Cth)

The *Biosecurity Act 2015* (Cth) legislates on Australia's biosecurity through a wide range of administrative, civil, and criminal provisions. Criminal provisions under this Act relevant to wildlife trafficking are contained in Part 3, which concerns prohibited goods. Under this Part, the Director of Biosecurity and Director of Human Biosecurity may make a joint determination as to goods that pose unacceptable risk to Australia's biosecurity; such goods may then be deemed 'prohibited' (s 173). A selection of the offences established under the *Biosecurity Act* with potential application to situations of wildlife trafficking are discussed below.

(a) Section 185 – Bringing or importing prohibited or suspended goods into Australian territory

Under s 185(2) of the *Biosecurity Act*, a person commits an offence by importing prohibited or suspended goods into Australia. Aggravations of this basic offence are also established under this section. The first of these aggravations takes account of whether, as a result of the importation, the person stands to obtain a commercial advantage over their potential competitors (s 185(4)). The second aggravation concerns whether the importation causes, or has the potential to cause, environmental harm or economic consequences (s 185(5)). In the context of wildlife trafficking, offenders could be prosecuted for the importation of any number of wildlife products into Australia, so long as they satisfy the requirement of being prohibited or suspended goods.

Penalties for contravention of the basic offence are up to five years imprisonment and up to 300 penalty units (s 185(2)), whereas penalties for the two flagged aggravations are up to ten years imprisonment for both aggravations, and fines of up to 2,000 penalty units for the first aggravation (s 185(4)), and up to 600 penalty units for the second (s 185(5)).

(b) Section 188 – Receiving or possessing prohibited or suspended goods brought or imported into Australian territory

Possession of prohibited or suspended goods that have been imported into Australia is an offence under s 188. Strict liability applies to this offence. An exemption to liability arises if the defendant can prove that the goods were not prohibited at the time of importation into Australia (s 188(2)). Similarly to the previous offence, this offence could be applied where wildlife products are the prohibited or suspended goods in question.

The maximum penalty for perpetration of this offence is up to 60 penalty units (s 188(1)). This is a comparatively low penalty, most likely as a result of the wide applicability of the offence due to strict liability.

3.2. Customs Act 1901 (Cth)

The *Customs Act 1901* (Cth) legislates on a wide range of topics pertaining to the importation and exportation of goods, and also establishes a number of offences. Of these offences, relatively few relate to wildlife trafficking. A handful of generally applicable offences do exist,³² but are typically not utilised in situations of wildlife trafficking, since the offence under the *EPBC Act* discussed earlier provide a more accessible point of entry for prosecutors when such circumstances arise.

Section 233 of the *Customs Act*, named ‘Smuggling and unlawful importation and exportation’, criminalises a wide range of conduct related to the unlawful carrying of certain prohibited goods into and out of Australia. The maximum penalty for this offence is 1 000 penalty units (s 233AB(1)).

IV. State and territory offences

Just as the transnational movement of wildlife specimens and products is regulated in Australian criminal law, so, too, is the movement of such products within Australia. The illegal trade of wildlife specimens and derivatives within Australia’s borders is dealt with under the legislation of the States and Territories. Unlike the relatively consolidated criminal

³² See *Customs Act 1901* (Cth) ss 50, 112.

framework at the national level, each of the States and Territories have a number of statutes that contain criminal offences relevant to the illegal capture and trade of wildlife.³³

Of note is the lack of uniformity between jurisdictions with regard to wildlife trafficking legislation. It is constitutionally enshrined that Australia's States and Territories operate as individual jurisdictions on certain matters. It is also acknowledged that, for a country as large and ecologically diverse as Australia, laws must necessarily differ from place to place in order to best address the circumstances of any particular State or Territory. The laws that best serve the mostly arid and sparsely populated terrain of the Northern Territory, for example, are largely ill-suited to the drastically different landscape of a locality such as Tasmania. As discussed later in this chapter, inconsistencies in legislation between the States and Territories can hinder enforcement efforts. Furthermore, difficulties and inadequacies may arise when circumstances of offending do not neatly conform to one jurisdiction.

Due to the sheer quantity and diversity of relevant legislation across the States and Territories, for the purposes of this section, offences and penalties with common objectives or elements from each jurisdiction are discussed categorically. Key points of divergence between jurisdictions will be signposted in order to highlight areas of weakness in the criminal legislation at the State and Territory level to be considered in the latter portion of this chapter.

1. Listing and general provisions

As with the *EPBC Act* at the national level, each State and Territory mandates the creation of a list of protected and threatened species to which their respective Acts will apply.³⁴ These lists are overseen and altered as needed

33 See Bricknell (n 3) 51 (table 15); note that the *Wildlife Conservation Act 1950* (WA) has since been repealed by the *Biodiversity Conservation Act 2016* (WA).

34 See *Biodiversity Conservation Act 2016* (NSW) s 4.2; *Biodiversity Conservation Act 2016* (WA) s 13; *National Parks and Wildlife Act 1972* (SA) sch 7; *Threatened Species Protection Act 1995* (Tas) s 13; *Nature Conservation Act 1992* (Qld) ss 76–82; *Flora and Fauna Guarantee Act 1988* (Vic) s 10; *Nature Conservation Act 2014* (ACT) s 63; *Territory Parks and Wildlife Conservation Act 1976* (NT) s 28.

by either the relevant Minister acting on scientific advice, or otherwise by a group of experts, often referred to as a ‘Scientific Committee’, or a variation thereof.³⁵ These bodies or persons act in a similar capacity to the Scientific Authority mandated under *CITES*.

Most of the States and Territories have implemented a form of permit system that regulates the movement of listed wildlife specimens in and out of each jurisdiction.³⁶ Alternatively, in some jurisdictions the relevant Minister may directly authorise certain actions.³⁷ These provisions operate largely homogenously, both with one another and with the similar *EPBC Act* provisions discussed previously, and do not tend to involve criminal offences unless contravened.³⁸

2. Illegal capture offences

The first step in the wildlife trafficking chain involves the usually unlawful acquisition of specimens from the wild.³⁹ Because wildlife traffickers and consumers of wildlife products typically value endangered species especially highly,⁴⁰ these species are usually those most often targeted for illegal capture. There are no offences at the national level that specifically outlaw the capture of certain animals, since the area tends to fall outside the legislative purview of the Federal Parliament under the Constitution, so this is instead addressed by State and Territory legislative measures.

The most common element of illegal capture offences in this context is the unlawful acquisition of a listed or otherwise prohibited specimen. Though comparable offences exist in every jurisdiction, considerations made by those offences can differ considerably. Section 88 of Queensland’s *Nature*

35 See *Biodiversity Conservation Act 2016* (NSW) s 4.9; *Flora and Fauna Guarantee Act 1988* (Vic) s 8; *Biodiversity Conservation Act 2016* (WA) s 37; *National Parks and Wildlife Act 1972* (SA) s 53; *Threatened Species Protection Act 1995* (Tas) s 8; *Nature Conservation Act 1992* (Qld) s 132; *Nature Conservation Act 2014* (ACT) s 31.

36 See, for example, *Wildlife Act 1975* (Vic) s 50; *Biodiversity Conservation Act 2016* (NSW) s 2.11; *Nature Conservation Act 2002* (Tas) s 29.

37 *Nature Conservation Act 1992* (Qld); *Biodiversity Conservation Act 2016* (WA) s 40.

38 See *Flora and Fauna Guarantee Act 1988* (Vic) s 56.

39 See Charles Bergman, ‘Wildlife Trafficking’ (2009) 40(9) *Smithsonian Magazine* 34, 35.

40 *Ibid.*

Conservation Act 1992,⁴¹ which makes it an offence for a person to take, keep or use a protected animal in Queensland, exemplifies this. The provision, although functionally similar to its counterparts in other jurisdictions,⁴² mandates a complex calculus based on the quantity and taxonomy of individual specimens unlawfully taken, in addition to those specimens' protected or threatened status, in order to determine an appropriate penalty (s 88(6)). A similar observation may be made with regard to Western Australia's *Biodiversity Conservation Act 2016*, wherein entirely separate penalties exist for offences involving cetaceans.⁴³ Discrepancies such as these are scattered throughout these pieces of legislation, and have been identified as a problem area in the past.⁴⁴

3. Illegal trade offences

Each State and Territory prescribes offences prohibiting unauthorised buying, selling, and dealing in listed wildlife.⁴⁵ These offences are comparable in that they share similar objectives and application, along with more or less uniform physical elements. The relevant New South Wales offence provides perhaps the most widely applicable example; s 2.5 of the *Biodiversity Conservation Act 2016* (NSW) makes it an offence for persons to 'deal in' animals or plants. The provision affords this term an expansive definition; to 'deal in' wildlife under s 2.5 encompasses a wide range of activities, including the buying, selling, possession, importing, and exporting of specimens prohibited by the Act. This definition encompasses the elements of each jurisdiction's comparative offences,⁴⁶ but it is one of only two jurisdictions to consolidate these prohibited actions under a single provision, the other being Tasmania with s 51 of the *Threatened Species Protection Act 1995*.

41 *Nature Conservation Act 1992* (Qld).

42 See, for example, *Wildlife Act 1975* (Vic) ss 45, 47, 47D; *Biodiversity Conservation Act 2016* (WA) ss 150, 152.

43 See *Biodiversity Conservation Act 2016* (WA) s 149(1)(a).

44 Boronia Halstead, *Wildlife Legislation in Australia: Trafficking Provisions* (1994) 2; Ciavaglia et al (n 3) 253; Wyatt (n 24) 65.

45 Bricknell (n 3) 51.

46 See, for example, *Wildlife Act 1975* (Vic) ss 47, 47D, 50; *Nature Conservation Act 1992* (Qld) ss 88, 88 A, 90 A, 91; *National Parks and Wildlife Act 1972* (SA) ss 58, 59, 60; *Biodiversity Conservation Act 2016* (WA) ss 150, 152, 157, 159, 160.

4. Animal cruelty offences

Because many wildlife trafficking methods involve inhumane and dangerous methods of transporting live specimens, animal cruelty offences are often applicable to such circumstances. Offences based on animal cruelty can provide an avenue of recourse for prosecutors in situations where the requisite elements of more complex trafficking offences cannot be made out,⁴⁷ such as where offenders are apprehended in the early stages of the trafficking process.

Most States and Territories have given effect to dedicated statutes on the topic of animal cruelty,⁴⁸ and many of the primary criminal law statutes also contain offences for serious animal cruelty.⁴⁹ These offences vary in their requisite elements, and in the severity of penalties attached. Certain animal cruelty provisions such as s 530 of the *Crimes Act 1900* (NSW) prioritise the criminal or otherwise reckless intention of the offender as a metric for liability.

Others, such as s 18 of Queensland's *Animal Care and Protection Act*, for example, make no mention of any requisite mental element to be proven. Rather, the provision allows for punishment of all manner of animal cruelty, including, relevant to the topic of wildlife trafficking, the inappropriate transport of live animals in a cruel manner under subs 18(2)(f). Offending under this provision can attract penalties of up to three years imprisonment, and fines of up to 2 000 penalty units.⁵⁰ This type of offence that requires only a physical action in order to be made out is a useful addition to the arsenal of law enforcement when it comes to intercepting wildlife trafficking operations in their early stages, or in cases where offenders have been apprehended while smuggling wildlife specimens cruelly, but perpetration of more serious offences such as those under the *EPBC Act* cannot be made out.

47 Melanie Wellsmith, 'Wildlife Crime: The Problems of Enforcement' (2011) 17 *European Journal of Criminal Policy and Research* 125, 138.

48 See *Animal Care and Protection Act 2001* (Qld); *Prevention of Cruelty to Animals Act 1986* (Vic); *Prevention of Cruelty to Animals Act 1979* (NSW); *Animal Welfare Act 1992* (ACT); *Animal Welfare Act 1985* (SA); *Animal Welfare Act 1993* (TAS); *Animal Welfare Act 2002* (WA); *Animal Welfare Act 1999* (NT).

49 See *Criminal Code* (Qld) s 242.

50 *Animal Care and Protection Act 2001* (Qld) s 18(1).

5. Penalties

Despite an apparent lack of uniformity in legislation, there is a generally similar range of available penalties for comparable offences between jurisdictions. Offences involving illegally dealing in wildlife tend to incur maximum custodial penalties of two years imprisonment,⁵¹ as do offences involving the illegal capture of such specimens.⁵² The Northern Territory is a prominent outlier here; commission of similar offences in this jurisdiction can attract custodial penalties of up to ten years imprisonment depending on the species taken or dealt.⁵³ This could be due to the disproportionately high number of rare and valuable species in the Territory.⁵⁴ Since much of the Northern Territory is uninhabited, and thus regular policing is practically impossible, higher penalties may also have been established in the hopes of an added deterrent effect in the absence of a consistent law enforcement presence.⁵⁵

Some jurisdictions, such as Western Australia and Tasmania, prefer non-custodial sentences in their statutory penalties. In fact, Western Australia's fairly broad range of offences related to wildlife trafficking under the *Biodiversity Conservation Act 2016* (WA) do not prescribe custodial penalties of any kind. Although Tasmanian offences do prescribe custodial penalties, those penalties do not exceed 12 months imprisonment.⁵⁶

51 See, for example, *Biodiversity Conservation Act 2016* (NSW) s 2.5; *Wildlife Act 1975* (Vic) s 45; *Nature Conservation Act 1992* (Qld) s 90 A; *Nature Conservation Act 2014* (ACT) ss 134–137; *National Parks and Wildlife Act 1972* (SA) s 60.

52 *Wildlife Act 1975* (Vic) s 41; *Nature Conservation Act 1992* (Qld) s 88; *National Parks and Wildlife Act 1972* (SA) s 51; *Nature Conservation Act 2014* (ACT) s 132.

53 *Territory Parks and Wildlife Conservation Act 1976* (NT) s 66.

54 Northern Territory Government, 'Threatened animals' (Web page, 2020).

55 Ciavaglia et al (n 3) 253.

56 *Threatened Species Protection Act 1995* (Tas) s 51.

V. Challenges and opportunities

1. National challenges

The *Environment Protection and Biodiversity Conservation Amendment (Wildlife Protection) Act 2001* was largely successful in its objective of clarifying Australia's commitment to implementation of *CITES* as aspired to in its Explanatory Memorandum, as well as producing a streamlined and comprehensive framework of legislative mechanisms to allow for easier implementation of the regulations.⁵⁷

Despite the Amendment Act providing this more convenient framework, problems of ineffective law enforcement have persisted. At the national level, the key problems with which Australia is faced with regard to combating wildlife trafficking are not necessarily legislative; rather, the issues lie in the ineffective utilisation of these laws.⁵⁸

The generally low priority of this crime type is a major contributing factor to the inadequacies of enforcement at play.⁵⁹ Most prosecutions of wildlife trafficking and illegal capture are carried out in the Magistrate's Court, and thus mostly go unreported.⁶⁰ Therefore, wildlife crime does not enjoy a substantial presence on any of the standard legal databases.⁶¹ Furthermore, few individuals or authoritative bodies in Australia tend to treat wildlife crime as a serious crime, partially due to these low levels of attention and priority, as evidenced by the typically lenient sentences imposed on offenders.

A range of potential solutions have been proposed. Some of them focus predominantly on the collection of data, with the goal of eliminating the impediment of speculation based on dark figures⁶² and thereby highlighting the actual significance of the crime type.⁶³ Other commentators such as Elizabeth Bennett instead propose that increased

⁵⁷ Allan Hawke, *The Australian Environment Act: Report of the Independent Review of Environment Protection and Biodiversity Conservation Act 1999* (October 2009) 225 [12.48].

⁵⁸ Ciavaglia et al (n 3) 254; Alacs and Georges (n 2) 156.

⁵⁹ Alacs and Georges (n 2) 156.

⁶⁰ Bricknell (n 3) xii.

⁶¹ Alacs and Georges (n 2) 148.

⁶² Wyatt (n 24) 80.

⁶³ Wellsmith (n 47) 145.

accessibility of government resources must be of paramount priority, suggesting that in order to begin treating wildlife trafficking with higher priority, legislative and executive officials need to 'start dedicating the scale of resources to illegal wildlife trade that they do to other serious crimes.'⁶⁴ To that end, she advocates for measures such as the provision of specialised enforcement personnel to combat wildlife trafficking head-on.⁶⁵

Despite variations in the proposed remedies, there is something of a consensus among the abovementioned scholarly literature that this low priority hampers the effective operation of wildlife trafficking laws, and has done so for some time. This must be addressed directly if enforcement of these laws is to improve.

Australia's generally minimal approach to internet surveillance of wildlife trafficking marketplaces presents a visible opportunity for improvement. As observed by Erika Alacs and Arthur Georges in 2008,⁶⁶ and substantiated by Samantha Bricknell two years later,⁶⁷ Australian law enforcement ostensibly carries out no systematic surveillance of online markets in order to pinpoint Australian species being illegally dealt within the country and on international markets. Engagement with online marketplaces only appears to take place in connection with investigations that have already been established, and not as a matter of routine.

Furthermore, a 2005 report by the International Fund for Animal Welfare (IFAW), a London based non-governmental organisation, found that, even over a decade ago, internet listings of illegal wildlife products were plentiful and easy to locate.⁶⁸ Since the time of the report's publication, Australia has ostensibly taken no major steps towards the amelioration of this problem. Due to the prevalence of online marketplaces in the illegal wildlife trade, the historical lack of attention paid to these platforms is no longer viable in combating wildlife trafficking. A thorough approach to internet surveillance by law enforcement would not only allow for increased accuracy as to quantifying the scale of the illegal wildlife trade

64 Elizabeth L Bennett, 'Another inconvenient truth: the failure of enforcement systems to save charismatic species' (2011) 45(4) *Oryx* 476, 478.

65 Ibid 478.

66 Alacs and Georges (n 2) 150.

67 Bricknell (n 3) 57.

68 IFAW, *Caught in the web: Wildlife trade on the internet* (2005) 2.

in Australia, but it would also assist law enforcement in the investigation and prosecution of offenders.⁶⁹

2. Challenges for States and Territories

At the State and Territory level, the impediments hindering effective operation of these laws appear to be more widespread; statutory flaws are apparent alongside inadequacies of enforcement. As indicated above, there is a plethora of legislation at the disposal of State law enforcement agencies. Herein lies one of the inherent problems with this State and Territory criminal legislation; because of the sheer magnitude of legislative provisions that may apply to any one case due to the nature of this illegal trade often necessitating interstate transport of the captured species, law enforcement in this area has the potential to fall victim to the very legislation that seeks to facilitate it.

In a 1994 discussion paper, Boronia Halstead suggests that this vast range of legislation, coupled with inconsistencies of legislative instruments and enforcement capabilities between jurisdictions, may result in the ineffective operation of these laws.⁷⁰ Although this observation was made over 25 years ago, at a time when Australia's national wildlife crime offences were still hampered by the shortcomings of the *Wildlife Protection (Regulation of Exports and Imports) Act 1982* (Cth), the critique outlined by Halstead here remains valid and virtually unaddressed by legislators.

These inconsistencies can lead not only to ill-informed investigation and judgments, but consequently to the imposition of far lower penalties than are appropriate.⁷¹ Moreover, double jeopardy restrictions, though performing an essential function in the interests of justice, are especially burdensome on these sorts of cases;⁷² since criminal actions cannot be carried out multiple times over the same set of facts, the State or Territory of prosecution would, understandably, prioritise its own interests in the

69 IFAW, *Killing with Keystrokes: An investigation of the illegal wildlife trade on the world wide web* (2008) 17.

70 Halstead (n 44) 2.

71 Ciavaglia et al (n 3) 250.

72 Ibid 252.

course of proceedings. This could result in sentences that are deaf to the circumstances of the offence perpetrated.

Sherryn Ciavaglia et al analysed an unreported case example from 2009 wherein a man was apprehended with dozens of specimens illegally captured from multiple jurisdictions, including Western Australia and the Northern Territory.⁷³ The offender was tried in a Queensland Magistrate's Court, and was fined only a fraction of the market value of the specimens.⁷⁴ This comparatively small fine was the sole penalty imposed, and the offender faced no form of punishment from any other State or Territory due to those jurisdictions' inability to prosecute further on the matter.⁷⁵ This is emblematic of the current state of criminal law regarding wildlife trafficking at the State and Territory level; a patchwork of statutes that, by and large, each serve their own jurisdiction well enough, but are often ignorant of the reality and prevalence of multi-state offending.

The low priority afforded to this crime type in Australia presents another impediment to effective enforcement at the State and Territory level, since it can result in law enforcement officials and members of the judiciary misunderstanding the application or effect of certain legislation.⁷⁶ In attempting to tackle this obstacle, one may look to Queensland as a potential exemplar. Section 90 A of Queensland's *Nature Conservation Act 1992*, as mentioned above, contains a set of practical examples that have presumably been included to assist in understanding the possible applications of the offence. The provision presents the following example: 'Person A buys protected wildlife from B at a market stall. Before buying the wildlife A asked B for evidence that it had been lawfully taken. In response, B replied that B did not have that evidence and that B bought the wildlife from someone else whom B did not know.'⁷⁷

Such examples would be useful additions to a multitude of trafficking offences, particularly at the State and Territory level where prosecutions often go unreported due to being heard in the lowest courts. While not directly affecting the body text of any provisions as such, a set of uniform

⁷³ Ibid.

⁷⁴ Ibid.

⁷⁵ Ibid 253.

⁷⁶ Halstead (n 44) 2.

⁷⁷ *Nature Conservation Act 1992* (Qld) s 90 A(1).

examples allowing simple interpretation of how each provision is meant to operate would not only raise understanding of the crime type generally among the legal community, but would also allow prosecutors and judges to better address complicated circumstances of offending.

While the prospect of uniform legislation on this topic has been considered in the past,⁷⁸ a 'one size fits all' approach is not recommended because it would be ill-suited to Australia's expansive geographic area and varying biodiversity circumstances. Nonetheless, Australia would benefit from a heightened level of cohesion with regard to these State and Territory laws. Provisions already acknowledging the possibility of multi-state offending represent a step in the right direction; once again, s 90 A of the *Nature Conservation Act 1992* (Qld) exemplifies this well, containing a subsection enabling judges to consider and apply the penalties of another jurisdiction where offending may have occurred.⁷⁹ Other jurisdictions could benefit from following the example set by s 90 A by adjusting their criminal provisions in a similar fashion to allow for better acknowledgement of instances where cross-border criminal activity has occurred.

3. Penalties and sentencing

As expounded above, the penalties for contravention of the *EPBC Act's* CITES-based regulations are, on paper, quite severe. Individual offenders can face up to 10 years imprisonment and be left with fines of penalty units equating to approximately AUD 210 000. This range of available penalties is extensive, outclassing analogous penalties in the United States and United Kingdom, often by large amounts.⁸⁰ Practically these penalties do not carry the impact that this observation imputes. Actual penalties imposed on offenders of wildlife trafficking crimes do not tend to reflect the seriousness of the crimes committed; custodial sentences are extremely rare, and fines levied do not usually even equate to the market value of the specimens or products trafficked.⁸¹ Ciavaglia et al note that a 'poor grasp of the enduring negative environmental consequences by

⁷⁸ See, for example, Halstead (n 44).

⁷⁹ *Nature Conservation Act 1992* (Qld) s 90 A(1)(b).

⁸⁰ Wyatt (n 24) 79.

⁸¹ Alacs and Georges (n 2) 155.

magistrates might be cause for the meagre penalties handed if a guilty verdict is reached'.⁸²

Pursuant to this, Alacs and Georges propose that increased severity of penalties such as fines and imprisonment is required 'to deter criminals from engaging in wildlife trafficking'.⁸³ This suggestion carries considerable merit, but in order to be effective it must be adopted at the points of prosecution and sentencing. The penalties prescribed by the *EPBC Act* offences already reflect the seriousness of wildlife trafficking. However, the rather low penalties actually imposed may negate any positive effect these maximums may otherwise bestow.

Additionally, caution must be exercised when justifying such claims by relying on the supposed benefits of criminal deterrence. Prevention of recidivism is of undeniable benefit to any crime type, but the effectiveness of deterrence as a purpose of sentencing is a point of contention among the legal community.⁸⁴ It is argued that the very existence of a criminal justice system carries something of a deterrent effect in itself.⁸⁵ Particular criticism is levelled at individual deterrence, as research suggests that it tends to have virtually no beneficial effect on rates of recidivism.⁸⁶ Moreover, due to the low average penalties, there exists a gross imbalance between the monetary incentives of wildlife trafficking and the potential risks, such that any deterrent factors at play are rendered impotent.⁸⁷ Hence, it is suggested that Alacs and Georges' recommendation be modified so these heftier penalties would instead be implemented 'to better reflect the seriousness of wildlife trafficking offences'. This alternatively phrased objective would retain the element of deterrence foregrounded by the authors, while also emphasising the low priority with which wildlife crime has grappled for decades.

82 Ciavaglia et al (n 3) 254.

83 Alacs and Georges (n 2) 155.

84 See, for example, Raymond Paternoster, 'How much do we really know about criminal deterrence' (2010) 100(3) *Journal of Criminal Law and Criminology* 765, 766.

85 Paul Robinson and John Darley, 'Does Criminal Law Deter? A Behavioural Science Investigation' (2004) 24(2) *Oxford Journal of Legal Studies* 173, 173.

86 Daniel S Nagin, Francis T Cullen, and Cheryl Lero Jonson, 'Imprisonment and reoffending' (2009) 38(1) *Crime and Justice* 115, 125.

87 Ciavaglia et al (n 3) 255.

Tony Smith contends that responsibility for facilitating this increase in severity lies with lawmakers at both the State and federal levels; he asserts that legislators' intentions in setting these high maximum penalties need to be made clearer in order to 'provide better guidance for magistrates and judges, thereby enabling them more appropriately to fit the punishment to the crime.'⁸⁸ While this assertion could be beneficial in the interests of heightened understanding of the seriousness of the crime type, the more 'hands-on response' mentioned earlier is more favourable, since it utilises existing legal mechanisms without the need for legislative overhaul.

VI. Conclusion

Australian criminal laws concerning wildlife trafficking have endured very limited public attention hitherto. Despite carrying the potential for significant harm to global biodiversity and to wildlife specimens themselves, wildlife trafficking does not enjoy the attention and resources afforded to other crime types.

At the national level, Australia has the advantage of a strong legislative base from which an effective system of enforcement may develop. An efficient, functional framework of criminal offences is provided by the *EPBC Act*, but shortcomings of enforcement mean that these offences are not operating to their fullest extent. The national legislative framework examined in this chapter demonstrates that the necessary tools for successful enforcement are readily available, yet they are seldom utilised effectively by law enforcement officials or members of the judiciary. Furthermore, despite reform having been urged for over a decade as to internet monitoring of the sale and purchase of illegal wildlife products, there remains ostensibly no continuous law enforcement presence in this area.

As well as sharing the above struggles, State and Territory criminal offences in this field are further plagued by legislative concerns. The complex network of overlapping and conflicting statutes expounded upon in this chapter has

88 Tony Smith, "What price a wedgetail eagle?" An examination of penalties imposed for harming protected species' (2004) 21 *Environmental and Planning Law Journal* 445, 448.

exhibited law enforcement responses that are, for the most part, seemingly blind to the multi-state offending that is commonplace within this area.

It is apparent that Australia would benefit from a revision of the actual penalties imposed on perpetrators of wildlife trafficking offences, alongside a general heightening of priority and attention for wildlife trafficking in the Australian criminal law landscape.

Bibliography

- Alacs, Erika and Arthur Georges, 'Wildlife across our borders: a review of the illegal trade in Australia' (2008) 40(2) *Australian Journal of Forensic Sciences* 147
- Bennett, Elizabeth L, 'Another inconvenient truth: the failure of enforcement systems to save charismatic species' (2011) 45(4) *Oryx* 476
- Bergman, Charles, 'Wildlife Trafficking' (2009) 40(9) *Smithsonian Magazine* 34
- Bricknell, Samantha, *Environmental Crime in Australia*, Australian Institute of Criminology, Research and Public Policy Series No 109, Canberra, ACT: Australian Institute of Criminology, 2010
- Chapman, Arthur D, *Number of Living Species in Australia and the World*, Report for the Australian Biological Resources Study, Canberra, ACT: Australian Government, Department of the Environment, Water, Heritage and the Arts, 2nd ed, 2009
- Ciavaglia, Sherryn et al, 'Current Issues with the Investigation of Wildlife Crime in Australia: Problems and Opportunities for Improvement' (2015) 18 *Journal of International Wildlife Law & Policy* 244
- Halstead, Boronia, *Traffic in flora and fauna*, Australian Institute of Criminology, Trends and issues in crime and criminal justice No 41, Canberra, ACT: Australian Institute of Criminology, November 1992
- Halstead, Boronia, *Wildlife Legislation in Australia: Trafficking Provisions*, Canberra, ACT: Australian Institute of Criminology, 1994
- Hawke, Allan, *The Australian Environment Act: Report of the Independent Review of Environment Protection and Biodiversity Conservation Act 1999*, Canberra, ACT: Department of the Environment, Water, Heritage, and the Arts, October 2009
- IFAW, *Caught in the web: Wildlife trade on the internet*, London: IFAW, 2005

- IFAW, *Killing with Keystrokes: An investigation of the illegal wildlife trade on the world wide web*, London: IFAW, 2008
- McDermott, Peter M, 'External Affairs and Treaties – The Founding Fathers' Perspective' (1990) 16(1) *The University of Queensland Law Journal* 123
- Nagin, Daniel S, Francis T Cullen, and Cheryl Lero Jonson, 'Imprisonment and reoffending' (2009) 38(1) *Crime and Justice* 115
- Northern Territory Government, 'Threatened animals' (Web page, 2020) <<https://nt.gov.au/environment/animals/threatened-animals>>
- Paternoster, Raymond, 'How much do we really know about criminal deterrence' (2010) 100(3) *Journal of Criminal Law and Criminology* 765
- Prest, James and Susan Downing, *Shades of Green? Proposals to Change Commonwealth Environment Laws*, Parliamentary Library, Research Paper 16 1997 – 98, Canberra ACT: Parliament of Australia, 23 June 1998
- Robinson, Paul and John Darley, 'Does Criminal Law Deter? A Behavioural Science Investigation' (2004) 24(2) *Oxford Journal of Legal Studies* 173
- Smith, Tony, "'What price a wedgetail eagle?" An examination of penalties imposed for harming protected species' (2004) 21 *Environmental and Planning Law Journal* 445
- UN General Assembly, *Tackling illicit trafficking in wildlife*, UN Doc A/71/L.88 (5 September 2017)
- Warchol, Greg, 'The Transnational Illegal Wildlife Trade' (2004) 17(1) *Criminal Justice Studies* 57
- Wellsmith, Melanie, 'Wildlife Crime: The Problems of Enforcement' (2011) 17 *European Journal of Criminal Policy and Research* 125
- Wyatt, Tanya, 'A comparative analysis of wildlife trafficking in Australia, New Zealand and the United Kingdom' (2016) 2(1) *Journal of Trafficking, Organized Crime and Security* 62

Chapter Thirteen

Lois et règlements douaniers relatifs au trafic de faune en suisse

SOUMEYA FERRO-LUZZI

Ce chapitre dresse une vue d'ensemble de la législation suisse en lien avec la circulation d'espèces protégées. Il est notamment question de présenter les principales autorités suisses compétentes dans la lutte du trafic illicite de faune, ainsi que d'analyser le système légal encadrant les diverses infractions à la législation sur la circulation des espèces protégées.

This chapter provides an overview of Swiss legislation related to the circulation of protected species. In particular, it presents the main Swiss authorities responsible for combating wildlife trafficking and analyses the legal system governing the various violations of the legislation on the circulation of protected species.

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I. Introduction

Lorsqu'il est fait mention du trafic illicite de faune, il vient souvent à l'esprit les tonnes de kilos d'ivoire saisis puis brûlés par les autorités d'un pays africain ou des rhinocéros persécutés et en voie de disparition à cause de leurs attributs physiques qui seront plus tard vendus sur le marché noir. Et, on se demande bien quel rôle la douane suisse aurait-elle à jouer dans ce domaine, puisque l'on pourrait penser qu'il ne s'agit là que d'un problème régional. Il serait difficile de concevoir que le trafic illicite de faune se passe également sur le sol helvétique. Pourtant, bien que méconnu, le trafic illicite de faune en Suisse existe et son incidence n'est pas à négliger.

Tout juste récemment, en janvier 2019, la douane suisse a par exemple saisi plus de 130'000 anguilles européennes à l'aéroport de Genève.¹ Or, il se trouve que ces anguilles, gravement menacées par la surpêche, sont protégées par la *Convention sur le commerce international des espèces de faune et de flore sauvages menacées d'extinction (CITES, RS 0.453)* et leur circulation est ri-

¹ Donatella Del Vecchio et Urs Bartenschlager, 'Saisies dans les aéroports de Genève et de Zurich, des civelles retrouvent les eaux douces', *Administration fédérale des douanes: Forum D* (Blog Post, 22 février 2019).

goureusement réglementée.² Le trafic illicite de faune ne concerne donc pas uniquement les grands mammifères, mais plus de 5'000 espèces animales protégées.³ En outre, le trafic illicite de faune ne se produit pas uniquement dans les pays où ont lieu le braconnage et la surpêche. Le commerce de faune est une problématique mondiale, puisque diverses routes sont utilisées pour acheminer la marchandise à destination finale et implique dès lors de traverser les douanes de plusieurs pays, tels que la Suisse.

La Suisse semble être une destination de transit appréciée par certains trafiquants de faune, vu les saisies importantes qui sont opérées par les douanes.⁴ En ce sens, le rôle de la Suisse dans la lutte de ce trafic est nécessaire, car il faut éviter que le pays ne devienne une plaque tournante du trafic illicite de faune. En effet, si la Suisse ne prend pas au sérieux ce problème, le pays ferait un pas en arrière s'agissant de la protection des espèces ou de la prévention du crime organisé et la réputation de la Suisse auprès de la communauté internationale en serait affectée.

Ce chapitre examine l'appareil juridique en matière douanière pour combattre et détecter le trafic illégal de faune en Suisse, ainsi que sa mise en œuvre par les diverses autorités. En particulier, il s'agit d'esquisser et de présenter les dispositions légales, réglementaires et, le cas échéant, les obligations internationales pertinentes qui autorisent et influencent l'activité des douanes en Suisse. Pour la conduite de cet article, les références se composeront essentiellement de sources primaires, à savoir les textes juridiques suisses et les divers instruments internationaux qui lient la Suisse. Il faudra néanmoins garder à l'esprit qu'il est très difficile d'obtenir des données et statistiques sur la réelle incidence du trafic illicite de faune, par nature clandestin.

Ce chapitre commence par exposer l'incidence du trafic illicite de faune en Suisse. En particulier, il est question de savoir si ce trafic en Suisse est conséquent et quelles sont les espèces concernées par ce problème. Le cadre légal suisse se rapportant au trafic illicite de faune ainsi que sa mise en œuvre sont ensuite exposés dans la troisième partie. Une vue d'ensemble du système douanier suisse et les différentes autorités administratives appelées à agir dans la lutte contre le trafic illicite de faune sont présentées dans la

2 Ouvert pour signature 3 mars 1973, 993 UNTS 243 (entrée en vigueur 1 juillet 1975).

3 CITES Secretariat, 'The CITES species' (Web page, 2 janvier 2017).

4 Del Vecchio et Bartenschlager (n 1).

quatrième partie. Les conclusions des divers constats posés dans ces développements ainsi qu'une palette de défis possibles auxquels les autorités suisses doivent faire face figurent dans la cinquième partie. Ce chapitre se conclut par une synthèse de ce qui aura été développé dans la sixième partie.

II. Le Trafic Illégal de Faune en Suisse: Incidence et Caractéristiques

Il n'est pas aisé de dresser un tableau exhaustif et clair de la situation en Suisse en matière de trafic illégal de faune, puisqu'il s'agit d'un marché illicite et donc par nature clandestin. De plus, des statistiques détaillées des marchandises saisies sont difficilement accessibles et il n'y a presque pas de jurisprudence en la matière. Environ 1200 décisions sont rendues chaque année dans le domaine de la conservation des espèces.⁵ En 2018, près de 740 spécimens ont été découverts aux douanes suisses et parmi eux, 673 ont été saisis. En comparaison internationale, l'Office fédérale de la sécurité alimentaire et des affaires vétérinaire (OSAV) dénote que la gravité de ce trafic est moindre en Suisse, et qu'aucune recrudescence de ce problème n'est à constater dans le pays.⁶ Nous pouvons distinguer trois principaux phénomènes à la base des importations d'espèces protégées en Suisse: les importations commerciales autorisées d'espèces protégées en Suisse, le trafic illicite de faune destiné à des fins comestibles et enfin le marché noir de la faune destinés à des fins non comestibles.

1. Les importations commerciales autorisées d'espèces protégées en Suisse

Le premier phénomène concerne toutes les importations commerciales d'espèces ou de spécimens protégés par la *CITES* en Suisse, a priori autorisées et légales, mais qui peuvent s'avérer illicites dans le cas où les formalités ne seraient pas respectées. La Suisse compte parmi les principaux importateurs

5 Suisse, Conseil fédéral, *Message relatif à la loi fédérale sur la circulation des espèces de faune et de flore protégées*, FF 11.058, 7 septembre 2011, 6455.

6 Email de Lisa Bradbury (Suisse, OSAV) à Soumeya Ferro-Luzzi, *Re: Demande de données/statistiques LCITES*, 22 février 2019.

de cuir de reptiles protégés par la *CITES* avec près de 115 000 autorisations d'importation par an délivrées par l'OSAV en raison de l'industrie du luxe et horlogère.⁷ Aux dires de l'OSAV, la majeure partie des décisions rendues en matière de protection des espèces, ainsi que des confiscations et séquestres opérés, concernent en réalité surtout des produits légalement commercialisés dont certaines formalités administratives font défaut et sont rectifiées par la suite.

2. Le trafic illicite de faune destiné à des fins comestibles

À côté de ce marché régulé, existe un deuxième phénomène, celui du trafic illicite de faune à des fins comestibles. On n'entend par ces termes le commerce d'espèces protégées prisées pour leur consommation alimentaire. Deux cas significatifs de ce type de trafic en Suisse sont exposés dans ce sous-chapitre : le commerce de viande de brousse, et celui d'anguilles.

L'importation clandestine et illégale de viande de brousse est une problématique à laquelle les autorités suisses sont de plus en plus confrontées. Parmi les espèces concernées, on trouve essentiellement des primates, des félins, ou encore certains reptiles.⁸ Une bonne partie de ces espèces figure aux annexes I et II de la *CITES*, rendant leur commerce international soit interdit soit régulé. Le trafic de ces animaux ne constitue pas uniquement une menace pour la conservation des espèces et l'écosystème, puisque d'un point de vue sanitaire, l'importation de telles espèces peut engendrer la transmission de pathogènes zoonotiques chez l'être humain et également contaminer d'autres espèces animales présentes en Suisse.⁹ Les auteurs d'une étude de 2013 sur les importations illégales de viande de brousse en Suisse sont parvenus, à l'aide d'outils statistiques, à estimer à 8.6 tonnes de viande de brousse importée chaque année en Suisse entre 2008 et 2011 sans qu'elle soit forcément saisie, ceci sur un total de 1013 tonnes de viandes toutes confondues importées illégalement toujours en Suisse.¹⁰ Bien que cette

7 Suisse, OSAV, *Tout interdire n'est pas la bonne voie* (octobre 2016).

8 Harriet Falk et al, 'Illegal import of bushmeat and other meat products into Switzerland on commercial passenger flights' (2013) 32(3) *Revue scientifique et technique* 727, 727.

9 Suisse, OSAV, *Viande de brousse: Brochure d'information et d'aide à l'identification* (20 novembre 2019) 3.

10 Falk et al (n 8) 733.

proportion de viande de brousse demeure faible comparé à la quantité des autres denrées à base de viande illicitement importées, les conséquences dommageables apparaissent plus graves, de la perspective de la protection des espèces et des dangers sanitaires. Une interpellation de la part d'une députée du Conseil national a d'ailleurs été déposée en 2013 afin de s'enquérir sur la position du Conseil fédéral sur ce phénomène.¹¹

À côté de la viande de brousse, d'autres espèces protégées sont également les cibles d'un trafic, telles que l'anguille européenne, désormais en danger critique d'extinction et listée à l'annexe II de la *CITES*.¹² L'anguille est un met très prisé en Asie et son prix au kilo sur le marché peut grimper jusqu'à CHF 6 000.¹³ Le trafic de cette espèce est en somme très lucratif et il n'est pas étonnant de constater que des organisations professionnelles très développées, avec des structures comparables aux organisations criminelles actives dans le trafic de stupéfiants s'en emparent.¹⁴ Afin d'échapper aux contrôles, les trafiquants choisissent souvent de transiter par la Suisse pour acheminer les marchandises jusqu'en Chine. Début 2019, 110 000 anguilles ont été découvertes à l'aéroport de Zurich et 130 000 à Genève.¹⁵ La Suisse semble être donc devenue une destination de transit attrayante pour les trafiquants.

3. Le trafic illicite de faune destiné à des fins non-comestibles

Le trafic d'espèces convoitées pour leur aspect et leurs attributs physiques constitue le troisième phénomène. En Suisse, ce trafic est fréquemment perpétré par des particuliers qui ramènent de leurs voyages souvenirs et autres curiosités achetés sur des marchés à l'étranger, sans connaître forcément la réglementation.¹⁶ Mais la Suisse peut également constituer une destination de transit pour les trafiquants professionnels, comme en 2015, lorsque la douane a saisi une quantité record de 262 kg d'ivoire à l'aéroport

11 Suisse, Assemblée fédérale, *Interpellation* 13.3887, Conseil national, 26 septembre 2016 (Ruth Humbel).

12 Suisse, OSAV, 'L'anguille européenne – une espèce de poisson en danger critique d'extinction' (Web page, 6 février 2019).

13 Del Vecchio et Bartenschlager (n 1).

14 United Kingdom, Department for Environment, Food & Rural Affairs, 'Policy Paper: London Conference on the Illegal Wildlife Trade (October 2018): Declaration Annex' *London Conference on the Illegal Wildlife Trade* (Web page, 28 January 2019).

15 Suisse, OSAV (n 12) 1.

16 WWF, 'Reportage Souvenirs' (Online publication, 4 juillet 2017).

de Zurich. La marchandise provenait de Tanzanie et était destinée à atterrir en Chine avec une escale à Zurich, afin d'échapper au viseur de la douane.¹⁷ Les douaniers retrouvent le plus fréquemment des bijoux en ivoire, des coraux ou encore des papillons rares.¹⁸ Si la demande pour le commerce illégal de faune en Suisse n'est pas aussi forte qu'en Asie par exemple, l'ampleur du phénomène n'est pas à négliger, spécialement s'agissant du trafic d'écharpes et autres étoffes en laine Shahtoosh, issue de l'antilope tibétaine listée à l'annexe I de la *CITES*. L'abattage de deux à cinq antilopes est nécessaire pour fabriquer un tel châle.¹⁹ La Suisse fait figure d'une des principales destinations où fleurit le trafic de laine Shahtoosh, en raison d'une présence importante de clients fortunés, en particulier dans les stations alpines. 2015 fut une année record de saisies pour les douaniers suisses, puisque 72 châles furent découverts.²⁰

III. Cadre Légal

1. Les engagements internationaux de la Suisse

1.1. La Convention internationale sur le commerce de faune et de flore sauvages menacées d'extinction (*CITES*)

D'un point de vue du droit international, la protection des espèces et la prévention du trafic illicite de faune sont réglés par la *CITES*. La Suisse entretient un lien spécial avec cette Convention, puisqu'elle fut l'un des premiers signataires et en est l'État dépositaire. Cela signifie que le pays conserve l'original de la Convention, informe les États signataires de l'adhésion de nouveaux pays (art. 25 *CITES*) et dispose d'une voix prépondérante au sein du comité permanent de la *CITES*, lors de votes sujets à controverses.

17 Suisse, Administration fédérale des douanes, 'La douane de l'aéroport de Zurich saisit la quantité record de 262 kg d'ivoire' (Web page, 24 août 2015).

18 WWF (n 16).

19 Suisse, OSAV, 'Châles en laine d'antilopes du Tibet' (Web page, 29 mars 2019).

20 Ibid.

De plus, le siège du Secrétariat *CITES* se trouve à Genève et la Suisse occupe une position active lors des différents comités organisés par la *CITES*.²¹

1.2. La Convention des Nations Unies contre la criminalité transnationale organisée

La *Convention des Nations Unies contre la criminalité transnationale organisée* (*UNTOC*, RS 0.311.54),²² entrée en vigueur pour la Suisse en 2006, a aussi son importance alors que le trafic illicite de faune est désormais de plus en plus aux mains d'organisations criminelles, dotées souvent d'une structure complexe avec des ramifications dans de nombreux pays.²³ Son but est «de promouvoir la coopération afin de prévenir et de combattre plus efficacement la criminalité transnationale organisée» (art. 1 *UNTOC*). L'*UNTOC* ne trouve toutefois à s'appliquer qu'en présence d'une infraction prévue par la convention, à savoir la participation à un groupe criminel organisé, le blanchiment d'argent, la corruption, ou l'entrave au bon fonctionnement de la justice ou en présence d'une infraction grave (art. 3(1) *UNTOC*). Dans les deux cas, ces infractions doivent impliquer un groupe criminel et être perpétrées de manière transnationale. Une infraction grave telle que définie par l'*UNTOC* doit renfermer une peine privative de liberté d'au moins quatre ans dans la législation nationale. Bien que cet instrument constitue pour les États un moyen efficace de lutte contre le crime organisé, elle ne peut pas pour le moment s'appliquer en Suisse en cas de trafic illicite de faune orchestré par une organisation criminelle, car la plus haute peine prévue en droit suisse en cas d'infraction contre la protection des espèces s'élève à trois ans d'emprisonnement. Les conditions d'application matérielles de cette Convention ne sont donc pas remplies.

21 Suisse, OSAV, *La Suisse et la conservation des espèces sur le plan international* (décembre 2017) 8.

22 Ouvert pour signature 15 novembre 2000, 2225 UNTS 209 (entrée en vigueur 29 septembre 2003).

23 ONU, CESNU, *Crime prevention and criminal justice responses against illicit trafficking in endangered species of wild fauna and flora*, UN Doc E/RES/2011/36 (28 juillet 2011) 25.

2. La législation nationale

2.1. La Loi fédéral sur la circulation des espèces de faune et de flore protégées (LCITES)

Après avoir ratifié la *CITES* en 1974, la Suisse a adopté une législation nationale pour se conformer à ses obligations internationales. La *Loi fédéral sur la circulation des espèces de faune et de flore protégées (LCITES, RS 453)* consiste en la transposition de la *CITES* dans le droit fédéral suisse. L'objet de la loi est le contrôle de la circulation des espèces de faune et de flore protégées, qu'il s'agisse de parties ou de produits fabriquées à partir de celles-ci (art. 1(1) *LCITES*). La protection de la *LCITES* est plus large que la *CITES*, puisqu'elle inclut comme espèces protégées aussi bien celles inscrites aux différentes annexes de la *CITES* (art. 1(2)(a) *LCITES*), que d'autres espèces non mentionnées aux annexes. Ces dernières comprennent des espèces menacées ou susceptibles de l'être (art. 1(2)(b) *LCITES*), ainsi que des espèces dont les spécimens pourraient être facilement confondus avec les espèces mentionnées aux annexes de la *CITES* (art. 1(2)(c) *LCITES*). La *LCITES* est complétée par l'*Ordonnance sur la circulation des espèces de faune et de flore protégées (OCITES, RS 453.0)*. C'est cette ordonnance qui précise les modalités de la procédure de contrôle en détail.

2.2. Obligations légales

La *LCITES* instaure un régime d'autorisations délivrées par l'OSAV nécessaires pour toute importation de spécimens d'espèces protégées en vertu de la *LCITES* (art. 7(1) et (2) *LCITES*). Les conditions d'octroi d'une autorisation d'importation sont réglées aux art. 3 à 6 de la *LCITES* et l'autorisation est délivrée par l'OSAV, qui est l'organe de gestion de la *CITES* (art. 8(1) *cum* 40(1) *OCITES*). L'art. 9 *OCITES* requière en plus du respect des conditions prescrites par la *CITES*, d'autres formalités, par exemple en lien avec la protection des animaux en cas d'importation d'animaux vivants (art. 9(1)(a)). Les autorisations d'importations peuvent être délivrées pour une longue durée (deux ans) pour certaines espèces décrites à l'annexe 4 de l'*Ordonnance sur les contrôles CITES (Ordonnance sur les contrôles CITES, RS 453.1)* à certaines conditions (art. 12 *OCITES*). Ces autorisations d'importation de longue durée permettent d'éviter de demander à chaque fois une autorisa-

tion d'importation et concernent surtout les importations commerciales de spécimens d'espèces protégées.

Aux termes de l'art. 8 *LCITES*, il existe des exceptions au régime d'autorisation d'importation, qui sont explicitées à l'art. 22 *OCITES*. De manière résumée, il n'est pas nécessaire de recourir à une autorisation lorsqu'il s'agit de spécimens considérés comme des objets personnels ou d'effets de déménagement (art. 22(1) *OCITES*) et pour autant qu'ils aient été acquis légalement.²⁴ À ce propos, l'art. 9 de l'Ordonnance sur les contrôles *CITES* qui reprend l'art. 22(6) *OCITES* précise quelles sont les quantités autorisées de spécimens d'espèces protégées, importées comme effets personnels ou de déménagement. Toutefois, l'exception tombe si, s'agissant des espèces listées à l'annexe II de *CITES*, celles-ci ont été acquises hors de la résidence habituelle du propriétaire ou que le pays d'origine exige un permis d'exportation. Quant aux espèces listées à l'annexe I, l'exception fait également défaut, si le propriétaire a acquis les spécimens en dehors de sa résidence permanente (art. 22(4) *OCITES*). Le régime d'exceptions s'applique dans tous les cas aux spécimens acquis avant l'entrée en vigueur de la *CITES* (art. 22(5) *OCITES*) ainsi qu'aux spécimens utilisés à des fins non commerciales entre institutions scientifiques (art. 23 *OCITES*).

D'autres cas de dérogations au régime d'autorisation d'importation peuvent également être envisagés par le Département fédéral de l'intérieur pour certaines espèces inscrites aux annexes II ou III de la *CITES*, à condition que l'exploitation de leurs populations naturelles soit durable (art. 8(2) *LCITES*). Il peut s'agir par exemple de marchandises fabriquées à partir de peaux d'animaux d'espèces inscrites aux annexes II ou III de la *CITES* (art. 10(a) *Ordonnance sur les contrôles CITES cum art. 27 OCITES*).

Dans tous les cas, l'art. 10(1) *LCITES* pose le principe voulant que quiconque se trouve en possession de spécimens d'espèce protégée par la *CITES* supporte le fardeau de prouver en tout temps la légalité de circulation de ces spécimens en présentant les documents permettant de vérifier leur provenance et origine.

24 Suisse, Arrêt du Tribunal administratif fédéral, B-4781/2011, 9 juillet 2012 [4.1].

2.3. Procédure d'importation

L'acquittement de l'obligation d'autorisation ne signifie pour autant pas que le devoir de déclarer des marchandises comportant des spécimens d'espèces protégées disparaît, comme le rappelle l'art. 22(1) in fine *OCITES*. En effet, la *LCITES* impose à quiconque qui entend importer, faire transiter ou exporter des spécimens d'espèces protégées de les déclarer au bureau de douane ou à un service désigné par l'OSAV (art. 6(1) *LCITES*). Les spécimens doivent être déclarés en principe auprès de l'administration fédérale des douanes (AFD) conformément à la législation douanière (art. 25ss de la *Loi sur les douanes*, *LD*, RS 631.0), sauf s'ils sont importés/en transit/exportés par une enclave douanière. Dans un tel cas, la déclaration se fera auprès de l'OSAV (art. 5(2) *OCITES*).

Or, la procédure de contrôle prévue à cet effet diffère en fonction d'une importation avec autorisation ou sans (lorsque le régime d'exceptions s'applique). Dans le premier cas, le lot doit être déclaré à la douane, accompagné de l'original du permis d'importation et le cas échéant du permis d'exportation *CITES*.²⁵ Dans le second cas, la déclaration peut se faire de manière électronique, par écrit ou oral auprès du bureau de douane et il suffit juste de présenter le cas échéant le permis d'exportation *CITES* et la facture/bon de livraison du lot.²⁶ Dans tous les cas, la déclaration douanière simplifiée par l'utilisation de la voie verte n'est pas permise (art. 28 de l'*Ordonnance de l'AFD du 4 avril 2007 sur les douanes*, *OD*, RS 631.01).²⁷

La procédure ordinaire veut qu'après déclaration, l'AFD informe à l'organe de contrôle de l'importation de spécimens d'espèce protégée, lorsqu'un contrôle approfondi est requis (art. 29(1)(a) *OCITES*). Cette procédure de contrôle approfondi représente en fait la majorité des cas d'importation,²⁸ puisque toutes les espèces listées à l'annexe I de l'*Ordonnance sur les contrôles CITES* sont soumises à cette procédure de contrôle et doivent être présentées à l'organe de contrôle dans les 48 heures à compter de leur déclaration (art. 30 *OCITES cum art. 7 Ordonnance sur les contrôles CITES*). En sus d'un contrôle

²⁵ Suisse, OSAV, 'Contrôle de conservation des espèces avec autorisation d'importation', *Affaires internationales* (Web page, 19 février 2019).

²⁶ Ibid.

²⁷ Suisse, Conseil fédéral (n 5) 6448.

²⁸ Suisse, OSAV, *Erläuterung zur Verordnung über den Verkehr mit Tieren und Pflanzen geschützter Arten (VCITES)* (7 septembre 2011) art 30.

documentaire (permis d'importation et permis d'exportation *CITES*), un contrôle physique et identitaire est effectué par l'organe de contrôle, dans les cas où il est question de spécimens listés à cette annexe I de l'*Ordonnance sur les contrôles CITES* (art. 7(2)(a) *Ordonnance sur les contrôles CITES*). Un contrôle physique et identitaire n'a toutefois pas lieu en cas d'exception d'autorisation d'importation prévu par l'art. 10 de l'*Ordonnance sur les contrôles CITES*. L'OSAV et les autres organes de contrôles, en accord avec l'OSAV, peuvent renoncer à des contrôles identitaires et physiques systématiques qui peuvent s'avérer trop onéreux et inappropriés ou qui concernent d'espèces listées aux annexes II ou III de la *CITES*, qui ne sont pas menacées et dont les probabilités de circulation illégale sont faibles (art. 7(3) *Ordonnance sur les contrôles CITES*). Dans ce cas, les autorités procèdent à des contrôles par sondages et en fonction des risques. S'agissant des lots en transit, seuls des contrôles par sondage ou en cas de soupçons sont effectués (art. 31 *OCITES*).

Les personnes assujetties à l'obligation de déclarer (art. 6(1) *OCITES cum* art. 26(a) *LD*) sont tenues à cette occasion de présenter tous les documents nécessaires sur l'origine des spécimens importés (art. 6(2) *OCITES*).

Pour cette procédure de contrôle spécifique, la compétence d'organe de contrôle revient à six différents postes de contrôle se trouvant à Bâle, l'aéroport de Genève, l'aéroport de Zurich, Berne, Chiasso et au Locle. Toutefois, en cas d'importation provenant de spécimens d'espèces protégées provenant de pays tiers de l'Union européenne et soumis au contrôle des services de police des épizooties, seuls les postes de contrôles des aéroports de Genève et Zurich sont compétents pour procéder au contrôle.²⁹

3. Mesures et sanctions

3.1. Mesures administratives

Le non-respect de cette procédure ordinaire constitue un cas de «contestation», et plusieurs mesures peuvent être prises par les différents organes de contrôle appelés à intervenir (art. 14 *LCITES*). L'art. 34 *OCITES* énumère de manière non exhaustive trois possibles cas de contestation pouvant conduire

²⁹ Suisse, OSAV (n 25).

à une mesure prise par un organe de contrôle. Le premier cas de contestation survient lorsque les documents requis pour les lots sont incomplets ou font défaut (art. 34(a) *OCITES*). Le deuxième cas de contestation se produit en cas de soupçon fondé que les lots contiennent des spécimens protégés par la CITES qui circulent illégalement (art. 34(b) *OCITES*). Le troisième cas de contestation s'applique aux lots qui n'ont tout simplement pas été déclarés ou présentés aux organes de contrôles (art. 34(c) *OCITES*).

L'art. 14 *LCITES* prévoit qu'en cas de contestation, les organes de contrôle peuvent ordonner une libération sous réserve (a), un refolement (b), un séquestre (c) ou une confiscation (d). Une libération sous réserve ou un refolement ne sont ordonnés qu'à titre exceptionnel et en principe lorsque que les formalités requises ne s'écartent que peu de la réglementation (art. 35 *OCITES*). Le plus souvent, l'organe de contrôle procédera directement au séquestre prévu dans six cas listés à l'art. 15(1) *LCITES*:

les spécimens font l'objet d'une contestation et leur libération sous réserve ou leur refolement n'est pas possible (a); les spécimens font l'objet d'une contestation et leur refolement n'est pas conciliable avec la protection des animaux (b), les organes de contrôle ont des raisons fondées de soupçonner que les spécimens ont été mis en circulation de manière illicite (c); les spécimens destinés à l'importation, au transit ou à l'exportation ne sont pas accompagnés des autorisations ou certificats nécessaires (d); les spécimens déclarés ne leur sont pas présentés (e); les spécimens contrôlés à l'intérieur du pays ne sont pas accompagnés des documents valables ou de la preuve qu'ils ont été mis en circulation légalement (f).

L'art. 36(3) *OCITES* offre toutefois la possibilité à la personne responsable de remédier à l'irrégularité dans un délai approprié et prévoit dans tous les cas la fin du séquestre et la libération du lot lorsque la conformité est rétablie (art. 37 *OCITES*). Si les spécimens sont sans maître, ou que leur circulation ne peut être régularisée, leur confiscation est ordonnée.

Les modalités du séquestre et de la confiscation sont réglées dans l'*OCITES* (art. 15(2), art. 16(2) *LCITES cum* art. 39 *OCITES*). Les spécimens séquestrés sont entreposés temporairement dans une structure désignée par l'OSAV alors qu'en cas de confiscation, l'OSAV peut choisir de les renvoyer dans l'État d'exportation, de les entreposer, aliéner ou détruire, en fonction de certains critères tels que la compatibilité avec les buts de la CITES (art. 39 *OCITES*). Il arrive que l'OSAV recoure à des solutions inventives afin de promouvoir la conservation des espèces. Par exemple, les anguilles saisies à l'aéroport de Genève mentionnées plus haut ont été relâchées dans le lac de

Morat (canton de Vaud), afin qu'elles puissent retrouver leur habitat naturel. Cette opération a été conduite par l'OSAV avec la collaboration des autorités du canton de Vaud et la division Antifraude de l'AFD.³⁰

Les mesures énumérées à l'art. 14 *LCITES* ont la nature de mesures administratives et non de sanctions pénales.³¹ Cela a pour conséquence que les garanties procédurales de l'art. 6 de la *Convention européenne des droits de l'homme* (telles que la présomption d'innocence) n'entrent pas en compte³² et que la procédure est régie non pas par le *Code de procédure pénale* suisse (CPP, RS 312.0), ni par la *Loi sur le Droit pénal administratif* (DPA, RS 313.0), mais par la *Loi fédérale sur la procédure administrative* (LPA, RS 172.021).

3.2. Dispositions pénales

En sus de ces mesures administratives, la *LCITES* incrimine pénalement certains comportements enfreignant la *LCITES*. Toute personne qui omet intentionnellement de déclarer des marchandises contenant des spécimens d'espèces protégées (art. 6(1) *LCITES*) ou qui importe/fait transiter/exporte des spécimens d'espèces protégées sans autorisation de l'OSAV (art. 7(1) *LCITES*) est punissable d'une amende de CHF 40 000 au plus. En cas de négligence, le plafond de l'amende est réduit à CHF 20 000 (art. 26(3) *LCITES*). Puisque seule une amende est prévue, ces diverses infractions sont considérées comme des contraventions en vertu de l'art. 333(1) et (3) du *Code pénal* (CP, RS 311.0).

Toutefois, en cas d'infraction grave envers la *LCITES*, l'art. 26(2) *LCITES* prévoit une peine privative de liberté de trois ans au plus ou une peine pécuniaire, ce qui équivaut à un délit en vertu des art. 10(3) *cum* art. 333(1) CP. Le montant maximal de la peine pécuniaire est de 180 jours-amendes à hauteur de CHF 3 000 par jour (art. 2 DPA *cum* art. 34 CP).³³ La gravité est «notamment» donnée lorsque l'infraction porte sur une quantité de spécimens d'espèce protégée listée à l'annexe I de la *CITES* si importante que l'espèce est menacée d'extinction (art. 26(2)(a) *LCITES*) ou que l'infraction est commise par métier ou de manière répétée (art. 26(2)(b) *LCITES*). Le Conseil

30 Del Vecchio et Bartenschlager (n 1).

31 Suisse, Arrêt du Tribunal administratif fédéral (n 24) n 4.2.

32 Ibid.

33 Suisse, Conseil fédéral (n 5) 6456.

fédéral souligne dans son message qu'une petite quantité de spécimens peut suffire pour constituer une infraction grave, en fonction du « degré de menace qui pèse sur l'espèce » (a).³⁴ Quant à l'infraction commise par métier, la portée correspond à celle du *CP* et l'on entend une infraction commise à titre professionnel.³⁵ Le terme « notamment » indique que la liste de l'art. 26(2) *LCITES* n'est pas exhaustive et d'autres cas d'infraction grave sont possibles.³⁶

L'art. 27(2) *LCITES* prévoit qu'en cas de concours d'infractions visées par la *LCITES* avec certaines lois, telles que la *Loi fédérale sur la protection des animaux* (LPA, RS 455), la *LD*, ou la *Loi du 20 juin 2014 sur les denrées alimentaires* (LDAI, RS 817.0), la peine prévue pour l'infraction la plus grave sera appliquée pour autant que les infractions soient poursuivies par la même autorité. Il est toutefois à noter que seule la *LDAI* renferme la possibilité d'une peine privative de liberté de plus de cinq ans, équivalent à un crime au sens du *CP*. Il s'agit du cas où une infraction prévue par l'art. 63(1) *LDAI* (par exemple l'importation de denrées alimentaires dangereuses pour la santé à la lettre (c) est assortie d'une circonstance aggravante de l'infraction par métier ou du dessein d'enrichissement (art. 63(2)). Par conséquent, la seule possibilité qu'un crime soit commis en rapport avec la *LCITES* serait le cas où un trafiquant enfreindrait simultanément les dispositions de la *LCITES* et commettrait une infraction qualifiée au sens de l'art. 63(2) *LDAI*. Un exemple serait la situation dans laquelle des trafiquants importent illicitement et de manière professionnelle en Suisse de la viande d'espèce protégées par la *CITES* et qui représenterait un danger pour la santé au sens de la *LDAI*. Qualifier ce comportement de crime aurait comme conséquence que l'*UN-TOC* serait applicable.

La nature des contraventions et délits prévus par la *LCITES* revêt le caractère de droit pénal administratif fédéral. La tentative, la complicité, et l'instigation sont punissables (art. 26(3) *LCITES* cum art. 22, 24 et 25 *CP*), y compris en cas de contraventions au sens de l'art. 26(1) *LCITES*, en vertu des art. 2 et 5 *DPA* cum 105(2) *CP*.³⁷

La violation d'autres dispositions prévues par la *LCITES* peut par ailleurs conduire à une simple amende (art. 26 (5) *LCITES*), en cas de non-respect de

³⁴ Ibid.

³⁵ Ibid.

³⁶ Ibid.

³⁷ Ibid.

formalités de gravité légère, telles que l'oubli de présenter un document (art. 3(1) *cum* art. art. 58 *OCITES*), ou encore de légers manquements lors de la procédure de contrôle (art. 30(2) *cum* art. 58 *OCITES*). Le montant maximal de l'amende s'élève à CHF 10 000 (art. 2 *DPA cum* 106(1) *CP*).³⁸

4. Aspects procéduraux

4.1. Compétence

La compétence pour l'exécution des dispositions de la *LCITES* revient aux organes de contrôles *CITES* (art. 17(1) *LCITES*),³⁹ à ne pas confondre avec l'organe de gestion de la *CITES* qui est de la compétence de l'OSAV (art. 40(1) *OCITES*) et qui à ce titre se charge principalement de délivrer les certificats et permis *CITES* (art. 9(1)(a) *CITES*, cf. *Infra* IV. C.). L'organe de contrôle en charge d'exécuter les dispositions sur la conservation des espèces peut de manière générale être incarné suivant les circonstances par plusieurs autorités: l'AFD, l'OSAV, le Service phytosanitaire fédéral consacré à la flore et les services vétérinaires cantonaux, les vétérinaires et autres organisations, lorsque le Département fédéral de l'intérieur leur confie une tâche (art. 41(1) *OCITES*). Dans les situations où l'AFD occupe la fonction d'organe de contrôle, il lui est permis de faire appel aux autres autorités de l'art. 41(1) *OCITES* et il s'agira principalement de l'OSAV (art. 41(2) *OCITES*).⁴⁰ Dans tous les cas, il est prévu que les différentes entités s'échangent les informations nécessaires pour l'accomplissement de leurs tâches (art. 22 *LCITES*).

La compétence pour la poursuite pénale est quant à elle réglée de manière précise par l'art. 27(1) *LCITES*. En cas d'infractions visées à l'art. 26 *LCITES*, l'OSAV est en principe compétent pour les juger et poursuivre pénalement. Toutefois, si une infraction envers l'art. 26 *LCITES* constitue simultanément une infraction à la *LD* ou la *Loi du 12 juin 2009 sur la TVA (LTVA)*, RS 640.20), la compétence revient à l'AFD (art. 27(1) ph. 2 *LCITES*). Or, l'importation de marchandises qui viole les dispositions de la *LCITES* constitue un cas de trafic prohibé incriminé à l'art. 120(1)(a) *LD*. L'interdiction du trafic prohibé protège non seulement les intérêts économiques, mais également d'autres

³⁸ Ibid.

³⁹ Ibid 6453.

⁴⁰ Suisse, OSAV (n 28) art 41.

intérêts, tels que sécuritaires, ou concernant justement la protection des espèces animales.⁴¹ Il s'en suit qu'à chaque fois que des spécimens d'espèces protégées sont importés, exportés ou transitent de manière illégale en Suisse, l'AFD – plus précisément : la division principale Antifraude douanière – est compétente pour la poursuite pénale de cette infraction (art. 240b *Ordonnance sur les douanes cum* art. 128(2) *LD cum* art. 27(1) *LCITES*).

4.2. Procédure

La procédure de jugement et de poursuite en cas d'infraction pénale est régie par le *DPA* tant dans les cas où l'OSAV est l'autorité de poursuite que ceux où il s'agit de l'AFD (art. 27(1) *in fine* *LCITES*). Face à une contravention, la poursuite pénale se prescrit par cinq ans et la peine par quatre (art. 27(3) *LCITES*), soit un délai de prescription plus long pour la poursuite que celui prévu par le *DPA* (deux ans, art. 11(1) *DPA*) et celui prévu par le *CP* (trois ans, art. 109 *CP*). La *LCITES* demeure silencieuse vis-à-vis du délai de prescription de l'action pénale et de la peine s'appliquant aux délits qu'elle comporte. Il faudrait donc appliquer les délais de prescription de dix ans pour l'action pénale et de quinze ans pour la peine, prescrits par le *CP* (art. 2 *DPA* qui renvoie *in fine* à l'art. 97(1)(c) et l'art. 99(1)(d) *CP*).

4.3. Entraide

Tant l'AFD que l'OSAV sont autorisés à collaborer et coordonner les enquêtes avec des autorités étrangères ou des organisations/comités internationaux, lorsque ceci apparaît nécessaire pour l'exécution des dispositions sur la protection des espèces et que les autorités étrangères garantissent un secret de fonction équivalent à celui prévu par droit suisse (art. 18 *LCITES*). De manière plus générale, toutes les entités de l'administration suisse qui occupent la fonction d'organes de contrôle *LCITES* sont invitées à se transmettre mutuellement les données nécessaires pour l'accomplissement de leurs tâches (art. 22 *LCITES*). L'échange de données au niveau international est également autorisé, pour autant qu'il soit nécessaire à l'exécution de la législation *CITES* (art. 23 *LCITES*). Les informations peuvent comporter des

41 Martin Kocher et Clavadetscher Diego (edit.), *Zollgesetz (ZG)* (2009) art. 120.

données sensibles, notamment concernant les sanctions pénales et administratives. Les autorités destinataires doivent toutefois garantir une protection adéquate des données et la réglementation fédérale sur la protection des données (en particulier l'art. 6 de la *Loi sur la protection des données, LPD*, RS 235.1) doit être respectée.⁴² Les autorités internationales ou étrangères peuvent comprendre des pays exportateurs, l'Union européenne, les organes de la *CITES* ou encore Interpol.⁴³

4.4. Voies de droit

Les moyens pour attaquer une décision varient en fonction de l'autorité qui rend la décision et de la nature de cette dernière. Une décision de nature administrative (par exemple un séquestre) ordonnée par l'OSAV peut faire l'objet d'une opposition (art. 24(1) *LCITES*) alors que si la décision est rendue par l'AFD, ou d'autres autorités exécutant la *LCITES*, un recours sera possible auprès de l'OSAV (art. 25(1) *LCITES*). La différence entre l'opposition et le recours réside essentiellement dans le délai accordé pour contester la décision. Celui-ci est de dix jours pour l'opposition (art. 24(3) *LCITES*) et trente jours pour le recours (art. 25(2) *LCITES*). Cette procédure contentieuse est régie par la *Loi fédérale sur la procédure administrative* et un recours auprès du Tribunal administratif fédéral (TAF) sera uniquement ouvert après la procédure d'opposition ou de recours menée devant l'OSAV (art. 32(1)(a) de la *Loi sur le tribunal administratif fédéral, LTAF*, RS 173.32).⁴⁴ Ceci a pour but de décharger le TAF «des malentendus, petites erreurs ou imprécisions»⁴⁵ qui concernent la majorité des décisions rendues en matière de conservation des espèces et qui sont souvent réglées après opposition/recours.

En cas de décision comportant une sanction pénale, la procédure est régie par le *DPA* (art. 27(1) *LCITES*). L'autorité compétente, l'OSAV ou l'AFD en fonction des circonstances, décernera un mandat de répression lorsqu'une amende ou une peine pécuniaire est envisagée (art. 62(1) hyp. 1 *DPA*), qui pourra être contesté par la voie de l'opposition (art. 67 ss *DPA*). Si l'autorité maintient sa décision après opposition, elle rendra un prononcé pénal

⁴² Suisse, Conseil fédéral (n 5) 6455.

⁴³ Ibid.

⁴⁴ Ibid.

⁴⁵ Ibid

(art. 70 *DPA*). Le destinataire de ce prononcé pénal pourra ensuite demander à être jugé par un tribunal (art. 72 *DPA*) et la procédure devant les tribunaux cantonaux aura lieu selon le *Code de procédure pénale*, sauf dispositions contraires prévues aux art. 73 à 81 *DPA* (art. 82 *DPA*). Lorsque l'infraction est si grave qu'une peine privative de liberté risque d'être ordonnée, l'autorité doit après l'enquête déférer directement le dossier au ministère public cantonal à l'intention du tribunal cantonal (art. 21(1), art. 22 et art. 73(1) *DPA*).⁴⁶ La procédure suivra son cours selon le Code de procédure pénale, sauf dispositions contraires prévues aux art. 73 à 81 *DPA* (art. 82 *DPA*).

5. Casuistique

Le fait qu'une procédure d'opposition ou de recours auprès de l'OSAV précède obligatoirement la saisine du TAF (art. 24 et 25 *LCITES*) rend la jurisprudence dans le domaine de la *LCITES* très sommaire, puisque cette procédure préalable résout la majorité des affaires contentieuses et s'avère par nature individuelle et non publiée. Les quelques jugements rendus par le TAF concernent surtout des contestations portant sur un séquestre ou une confiscation ordonnée par l'OSAV⁴⁷ et aucun recours n'a pour l'heure été porté au Tribunal fédéral. Il est donc difficile de cerner une réponse de la part des autorités envers le trafic de faune. Les seules données accessibles au public sont celles figurant dans le rapport *CITES* élaboré par la Suisse en 2015 et couvrant la période 2013 – 2014.⁴⁸

Ce dernier rapport précise qu'aucune poursuite pénale n'a été entreprise entre 2013 et 2014⁴⁹ et seules des amendes administratives ont été ordonnées dont le montant s'est élevé en moyenne à CHF 2 358 en 2014.⁵⁰ Certaines de ces importations illégales impliquaient un trafic sur plusieurs années de spécimens en quantité non négligeable et dont l'espèce était sévèrement menacée. Un cas d'importation illégale de 22.8 kg de viande de pangolin

46 Andreas Eicker et al, *Verwaltungsstrafrecht und Verwaltungsstrafverfahrensrecht* (2012) 243.

47 Suisse, Arrêt du Tribunal administratif fédéral, B-4876/2011, 18 juin 2012; Suisse, Arrêt du Tribunal administratif fédéral, B-4857/2010, 15 juin 2011; Suisse, Arrêt du Tribunal administratif fédéral, B-4781/2011, 9 juillet 2012.

48 Suisse, OSAV, *CITES Biennial Report Switzerland 2013/2014* (6 juillet 2015).

49 Ibid 6.

50 Ibid Annexe 2.

(espèce gravement menacée listée à l'annexe I de la *CITES*) en 2013 fut par exemple réprimée par une condamnation à payer une seule amende de CHF 1 000.⁵¹ Dans un autre cas survenu en 2016, la propriétaire d'un châte Shahtoosh s'est vu confisquée ce dernier par l'OSAV ainsi que condamnée au paiement d'une simple « taxe » de CHF 250.⁵²

IV. Mandat et Responsabilités des Autorités Suisses en Lien avec les Douanes

1. L'Administration fédérale des douanes

Les postes de douanes sont le dernier rempart de la lutte contre le trafic illicite de faune : c'est à cet endroit qu'interviennent la douane et les autres autorités pour détecter la fraude. Il est néanmoins impossible de contrôler toutes les marchandises qui passent par la Suisse, vu leur nombre considérable. En 2018, par exemple, l'Administration fédérale des douanes (AFD) a traité environ 38.7 millions de déclarations en douanes.⁵³

La Suisse a la particularité de se situer au milieu de l'Europe et les accords bilatéraux avec l'Union européenne (UE) ont leur importance dans l'activité douanière. Le pays est partie de l'Association européenne de libre-échange (AELE), qui instaure une zone franche de droits de douanes, et est également partie à l'*Accord relatif à la facilitation des contrôles et des formalités lors du transport de marchandises* conclu en 2009 avec l'UE.⁵⁴ Ce texte dispense en substance la Suisse de procéder à des contrôles automatiques de toutes les marchandises qui entrent sur le territoire suisse et les contrôles sont désormais effectués par sondage, en fonction des risques détectés. Cette exemption des contrôles automatiques et la suppression des droits de douanes ne s'appliquent pas aux États tiers de l'AELE. Il s'en suit que les aéroports de

⁵¹ Ibid Annexe 2.

⁵² Suisse, Arrêt du Tribunal administratif fédéral, B-6449/2016, 2 février 2017, 2.

⁵³ Suisse, Administration fédérale des douanes, *L'administration fédérale des douanes: sécurité pour la population, l'économie et l'État, Faits et chiffres de l'AFD en 2019* (2019) 28.

⁵⁴ Ordonnance sur l'organisation du gouvernement et de l'administration, Confédération Suisse-Communauté européenne, RS 0.631.242.05 (entrée en vigueur 1 janvier 2011).

Genève et de Zurich, qui offrent des liaisons aériennes dans le monde entier, constituent des frontières extérieures de la zone AELE et les contrôles y sont renforcés.

Le contrôle aux douanes est géré par l'AFD, rattachée au Département Fédéral des Finances.⁵⁵ L'AFD est membre de l'Organisation mondiale des douanes (OMD), chargée d'élaborer des conventions afin d'harmoniser les procédures douanières, ainsi que de faciliter les échanges d'informations et l'assistance mutuelle entre les diverses administrations nationales.⁵⁶ L'OMD a en outre conçu l'application CEN (OMD-CEN) qui consiste en un réseau douanier de lutte contre la fraude donnant accès à une base de données et d'informations à des fins de renseignement.⁵⁷

2. Tâches et prérogatives de l'AFD

Les douanes aspirent à des objectifs qui peuvent s'avérer antagonistes, puisqu'elles doivent permettre un trafic fluide des personnes et marchandises aux frontières tout en garantissant des contrôles sérieux et appliqués dans la lutte contre la fraude. Un des principaux objectifs des douanes consiste à assurer la sécurité intérieure du pays en prévenant et combattant les actes illicites à la frontière (art. 14(1)(c) *Ordonnance sur l'organisation du Département fédéral des finances*) (Ord DFF)).⁵⁸ À cet effet, l'AFD est amenée dans l'exercice de ses tâches à appliquer plus de 200 lois et ordonnances,⁵⁹ qu'elles soient d'ordre douanier ou autre, tel que la *Loi sur les stupéfiants*, la *Loi sur les armes* ou encore la *Loi sur les espèces protégées* (LCITES).

La *Loi sur les douanes* (LD) est la principale base légale qui régit l'activité de l'AFD, puisqu'elle règle comment les droits de douanes sont perçus, comment la circulation des marchandises et des personnes aux frontières doit être surveillée et contrôlée, et comment l'AFD exécute les tâches qui lui incombent. Plusieurs infractions d'ordres pénaux sont prévues par la LD, telles que

55 *Ordonnance sur l'organisation du gouvernement et de l'administration* (Confédération Suisse) 25 novembre 1998, RS 172.010.1 (entrée en vigueur 1 janvier 1999) art 8(1).

56 Kunio Mikuriya, 'Illicit Wildlife Trade and the Role of Customs' (2016) 12(1) *University of Pennsylvania Asian Law Review* 55, 55.

57 OMD, 'Réseau douanier de lutte contre la fraude (CEN)' *CEN Suite* (Web page, 2019).

58 *Ordonnance sur l'organisation du Département fédéral des finances* 2010 (Confédération Suisse) 17 février 2010, RS 172.215.1 (entrée en vigueur 1 mars 2010) art 14(1)(c).

59 Suisse, Administration fédérale des douanes (n 53) 5.

le trafic prohibé (art. 120 *LD*), disposition particulièrement pertinente dans le cadre du trafic illicite de faune, déjà mentionnée dans la troisième partie. Le fait que la *LD* prévoit des infractions pénales a pour conséquence que l'AFD peut aussi revêtir la casquette d'une autorité pénale de poursuite et de jugement. En effet, l'art. 128 *LD* prévoit que l'AFD est l'autorité compétente pour poursuivre et juger ces infractions pénales, conformément aux dispositions de la *LD* et en respectant la procédure prévue par la *Loi sur le droit pénal administratif*.

3. L'Office fédéral de la Sécurité alimentaire et des affaires vétérinaires

L'Office fédéral de la sécurité alimentaire et des affaires vétérinaires (OSAV), rattaché au Département fédéral de l'intérieur, occupe également une place importante dans le domaine de la protection des espèces, puisqu'il s'agit de l'organe de gestion chargé d'appliquer la *CITES* en Suisse, en vertu de l'art. 40(1) de l'*Ordonnance sur la circulation des espèces protégées (OCITES)*. Cela signifie qu'il s'occupe de l'application directe de la *CITES* sur le terrain et veille à son respect aux différents postes frontières. Ces postes de contrôle se chargent à la fois de vérifier que les prescriptions légales sont respectées lorsque des espèces protégées sont importées en Suisse. Des contrôles vétérinaires et sanitaires des animaux et marchandises animales entrant dans le territoire suisse y sont également effectués.⁶⁰ L'OSAV remplit surtout des tâches administratives en délivrant les autorisations d'importation d'espèces protégées par la *CITES*, en engageant des recours, procédures administratives et pénales contre les contrevenants, ou encore en procurant formation et transfert de connaissances aux autres autorités d'exécution, telles que l'AFD.⁶¹

4. La collaboration entre l'Administration fédérale des douanes et l'Office fédéral de la sécurité alimentaire et des affaires vétérinaires

Tant l'Administration fédérale des douanes que l'Office fédéral de la sécurité alimentaire et des affaires vétérinaires constituent les principaux organes de

60 Suisse, OSAV, 'Service vétérinaire de frontière' *Mandat et missions* (Web page, 12 décembre 2019).

61 Suisse, OSAV, 'Division affaires internationale' (Web page, 13 septembre 2019).

contrôle de la *CITES* (art. 41(1) *OCITES*). La loi ne fournit pas une définition précise de ce qu'est un organe de contrôle, mais un grand nombre de dispositions figurant dans la *LCITES* et l'*OCITES* y font référence et attribuent à cet organe de contrôle des compétences variées et multiples. Toute la difficulté réside dans le fait de savoir quand est-ce que la qualité d'organe de contrôle revient à l'administration des douanes ou à l'office vétérinaire. L'intention du Conseil Fédéral est d'attribuer une responsabilité principale conjointe de l'exécution de la *LCITES* à ces deux entités.⁶² Toutefois, le Conseil Fédéral insiste sur le fait que l'Office vétérinaire demeure l'autorité de gestion et d'exécution de la *CITES* dans son message accompagnant la *LCITES*.⁶³ L'interprétation systématique de l'art. 41(1) de l'*OCITES* qui désigne en premier l'Office vétérinaire comme organe de contrôle nous laisse aussi suggérer que son rôle dans les contrôles en rapport avec la *CITES* s'avère conséquent voire prépondérant. D'ailleurs, l'administration des douanes admet elle-même ne pas avoir «toute la qualité d'expert dont dispose les services de l'[Office vétérinaire]» et n'hésite pas à se tourner vers ce dernier en cas de besoin.⁶⁴

V. Défis et Recommandations

1. Application des sanctions et réforme législative

La modification de la législation en matière de conservation des espèces constitue un des défis auxquels la Suisse fait face. Les données du rapport *CITES* de la Suisse indiquent une tendance des autorités fédérales à ordonner des amendes relativement faibles en cas d'infraction à la *LCITES*. Finalement, sur les 1'200 décisions rendues chaque année⁶⁵ en matière de conservation des espèces, il s'agit surtout de mesures administratives (telles que séquestre ou confiscation) qui sont prononcées.⁶⁶ La légèreté des mesures ordonnées par les autorités pose le problème de l'effet dissuasif que comporte réellement ces dispositions pénales. La menace pour les trafiquants de se voir

⁶² Suisse, Conseil fédéral (n 5) 6444.

⁶³ Ibid 6453.

⁶⁴ Suisse, Arrêt du Tribunal administratif fédéral, B-4781/2011, 9 juillet 2012, n 3.1.

⁶⁵ Suisse, Conseil fédéral (n 5) 6455.

⁶⁶ Suisse, OSAV (n 48) Annexe II.

confisquer leurs marchandises et se voir infliger une amende CHF 10 000 est-elle vraiment percutante lorsque l'on sait que le marché d'espèces protégées peut s'avérer autant lucratif que celui des stupéfiants ?⁶⁷ Bien que la répression ne constitue de loin pas l'unique moyen de lutte contre le trafic illicite de faune, elle demeure un élément central et une réponse intransigeante des autorités est nécessaire pour parvenir aux objectifs escomptés. Le fait que les trafiquants n'encourent que des peines pécuniaires d'un faible montant comporte également le danger que la Suisse apparaisse comme une destination de transit attractive aux yeux des malfaiteurs, toujours à la recherche de failles; cela d'autant plus qu'actuellement, la réponse des pays voisins envers le trafic illicite de faune s'avère être plus ferme qu'en Suisse.⁶⁸ La clémence apparente des autorités envers les contrevenants à la *LCITES* peut s'expliquer par plusieurs raisons.

D'une part, comme l'OSAV l'a indiqué, les autorités suisses estiment que l'incidence du trafic illicite de faune est relativement faible sur son territoire, par rapport à d'autres pays.⁶⁹ Partant, la prévention de ce trafic n'est pas considérée comme une priorité pour les autorités qui semblent préférer s'attaquer à d'autres formes de contrebandes. Une étude de l'OMD de 2014 s'est penchée sur la perception du commerce illégal de faune par les administrations douanières membres de l'OMD et à laquelle l'AFD a participé.⁷⁰ Les résultats de l'étude démontrent que les administrations douanières de la région Europe placent sur une échelle des priorités de 1 à 8 (8 étant l'objectif le plus important) les actions contre le trafic illégal de faune à 3.2. Comparativement, la lutte contre l'évasion fiscale, le trafic de drogues et de tabac oscillent entre 6.6 et 6.1 sur la même échelle.⁷¹ L'importance accordée davantage par les douanes à ces différentes contrebandes comparée au trafic illicite de faune peut s'expliquer notamment par le fait que le commerce illégal d'espèces protégées ne rapporte pas de recettes, contrairement à la lutte contre l'évasion fiscale et n'apparaît pas aussi dangereux pour l'homme comme peut l'être le trafic d'armes ou de stupéfiants. De plus, comme certains le notent, il n'est pas aisé pour un État et ses entités de

67 Del Vecchio et Bartenschlager (n 1).

68 Suisse, Assemblée fédérale, *Motion 15.3958 de Guillaume Barazzzone : Renforcer les sanctions pénales en suisse contre le commerce illicite d'espèces menacées*, 24 septembre 2015.

69 Email de Lisa Bradbury (n 6).

70 Chang-Ryung Han, *Étude relative à la perception du commerce illégal d'espèce sauvages par les Administrations douanières*, document de recherche de l'OMD n°34 (2014) 4.

71 Ibid 5.

justifier et asseoir leur politique en matière de prévention du trafic de faune, s'il n'y a pas auprès de la population un quelconque soutien et une prise de conscience sur l'importance de préserver la biodiversité et de prévenir la contrebande d'espèces protégées.⁷²

D'autre part, les infractions envers la *CITES* revêtent en principe la nature de contravention au regard du *Code Pénal*, voire tout au plus de délit dans les cas graves. La *CITES* exige des États de pénaliser la violation des dispositions de la *CITES* (art. 8(1)(a) *CITES*),⁷³ mais non de les ériger en crime. La Suisse a ainsi décidé comme la grande majorité des pays membres de la *CITES*⁷⁴ de ne pas criminaliser au sens propre du terme le trafic illicite de faune, avec pour conséquence d'écarter toute possible application de l'*UNTOC*. Pourtant, la qualification de l'infraction en tant que crime ou délit est un indicateur pour évaluer la gravité du comportement incriminé et influence la perception de la culpabilité d'un point de vue moral auprès des autorités et plus largement du public: la commission d'un délit sera moralement et socialement plus acceptée que celle d'un crime.⁷⁵ En outre, la manière d'incriminer un certain comportement dans la législation reflète l'importance qu'accorde l'État aux intérêts protégés par la loi. Généralement, plus les peines prévues sont lourdes, plus l'atteinte au bien juridique protégé est considérée comme grave aux yeux de l'État.

Augmenter dans la loi les peines prévues pour les infractions envers la *CITES* permettrait d'élever le seuil des sanctions pénales à appliquer et inciterait les autorités de jugement à prononcer des peines plus lourdes dans les cas qui le requièrent.⁷⁶ Cela démontrerait également un durcissement de la position de l'État contre les infractions envers la *CITES*. Dans ce sens, une motion parlementaire a été déposée en 2015 afin de durcir les sanctions pénales prévues par la *CITES* et prévoir notamment que « le commerce par métier ou de manière répétée d'espèces menacées et de produits issus de celles-ci soit considéré comme un crime ».⁷⁷ Le Conseil fédéral s'est montré subséquemment favorable à accepter la motion, mais ne s'est depuis lors plus prononcé

⁷² Mikuriya, (n 56) 56.

⁷³ UNODC, *World Wildlife Crime Report: Trafficking in Protected Species* (2016) 25.

⁷⁴ Ibid 26.

⁷⁵ Melanie Wellsmith, 'Wildlife Crime: The Problems of Enforcement' (2011) 17(2) *European Journal on Criminal Policy and Research* 125, 140.

⁷⁶ Ibid 141.

⁷⁷ Suisse, Assemblée fédérale (n 68).

sur la question. Après plus de trois ans que la motion a été déposée, nous ne disposons pour l'heure pas d'autres informations sur la concrétisation de cette motion et une éventuelle réforme de la *LCITES*.

2. Collecte de données

Le silence du Conseil fédéral sur cette problématique indique non seulement que la modification de la *LCITES* ne constitue pas une priorité pour le gouvernement actuellement, mais aussi que les informations sur cette thématique sont communiquées avec parcimonie. De manière générale, nous constatons en effet que peu de données/statistiques sont collectées et mise à la disposition du public en rapport avec la conservation des espèces en Suisse. À ce sujet, la *CITES* exige à son art. 8 que les États parties établissent des rapports périodiques sur la mise en œuvre de la *CITES* à l'échelle nationale, contenant des données notamment sur le nombre et la nature des permis délivrés, la quantité et le type de spécimens, mais aussi les mesures législatives et administratives prises en lien avec la *CITES*. Ces rapports sont censés être à la disposition du public dès lors qu'aucune incompatibilité avec les dispositions légales n'est dénotée. Or, à ce jour, un seul rapport biennal *CITES* a été établi par la Suisse datant uniquement de 2013 et couvrant la période de 2013 – 2014.

Ce dernier rapport révèle que la Suisse ne recueille aucune information sur l'efficacité de la législation sur la conservation des espèces, telle que la mise en œuvre de la réglementation sur le sol suisse ou encore concernant la clarté des obligations légales.⁷⁸ Dans le même sens, l'AFD a indiqué dans un email qu'aucune enquête statistique concernant spécifiquement le trafic illicite de faune n'est menée par elle. Il en va de même pour l'OSAV qui affirme ne pas posséder de données sur les sanctions appliquées en lien avec la *LCITES* et préconise de s'adresser à l'AFD pour obtenir ce genre d'informations. Cette opacité s'agissant des sanctions ordonnées nous rappelle l'incident survenu en 2015 (cf. *Supra* II. 4.) lorsque 260 kg d'ivoire avait été saisis à l'aéroport de Zurich. Aux dires du Conseil fédéral de l'époque, une enquête

⁷⁸ Suisse, OSAV (n 48) 5 – 7.

pénale avait été ouverte,⁷⁹ mais il est depuis lors impossible de connaître l'issue de cette dernière et ce que sont advenus les trafiquants.

La collecte de données demeure pourtant essentielle à la lutte contre le trafic illicite de faune. Les données récoltées sur le types d'infractions, le genre d'espèces concernées, les pays de provenance ou encore le profil des auteurs permettraient d'évaluer la réelle portée du problème en Suisse et d'apporter une réponse plus ciblée en retour, en définissant des stratégies sur la base des risques établis.⁸⁰ L'analyse des informations recueillies offre également le moyen de mesurer l'efficacité de l'appareil de répression en place et de s'adapter en conséquence.⁸¹ Actuellement, seulement 1 % des dépenses consacrées par l'OSAV à la recherche concernent la conservation des espèces. Or, la recherche dans le domaine de la conservation des espèces permet une meilleure compréhension du phénomène du trafic illicite de faune, en étudiant le fonctionnement et les causes de ce marché noir, telles que les mobiles des trafiquants.⁸²

VI. Conclusion

L'objet de cette analyse a principalement porté sur l'étude de la législation en matière de trafic illicite de faune en Suisse. Afin de mesurer la portée et l'efficacité des dispositions légales, il fut nécessaire d'établir au préalable une vue d'ensemble de ce problème en Suisse et d'observer comment le phénomène du trafic illicite prend forme dans le pays. Force est de constater que la Suisse peut dans de nombreux cas s'avérer être une destination de transit prisée des trafiquants. Les autorités fédérales affirment que le commerce illégal d'espèce protégées ne constitue pas un problème majeur pour le pays comparé à la situation internationale. Pourtant, l'ampleur de certains trafics, tels que celui de l'anguille, de la viande de brousse, ou encore de châles en laine d'antilopes tibétaines est particulièrement préoccupante dans le pays.

79 Suisse, Assemblée fédérale, *Interpellation 15.3829*, Conseil des États, 10 septembre 2015 (Pascale Bruderer Wyss).

80 UNDOC, *Compilation d'outils pour l'analyse de la criminalité liée aux espèces sauvages et aux forêts* (2012) 187.

81 Ibid 189.

82 Ibid 201.

En réponse à ce problème, la Suisse s'est dotée d'une législation nationale reflétant les dispositions de la *CITES*. La *LCITES* réglemente la circulation des espèces protégées par la *CITES* et instaure un régime d'autorisation d'importation et d'exportation pour toute personne transportant des spécimens d'espèces protégées. L'organe de gestion de la *CITES* est représenté par l'OSAV qui occupe un rôle prépondérant dans la mise en œuvre de la *CITES* en Suisse. Toutefois, la compétence de contrôler la correcte application de la *LCITES* revient essentiellement à l'OSAV et l'AFD qui exécutent conjointement les dispositions de la loi. Il est important que l'AFD et l'OSAV continuent de travailler ensemble afin de permettre une exécution efficace de la *LCITES*, l'OSAV partageant ses connaissances scientifiques en matière de faune et l'AFD son savoir-faire en matière de contrôle et de poursuite.

Bien que la *LCITES* prévoie des sanctions pénales en cas de violation de ses dispositions (contraventions, voire délits dans les cas graves), presque uniquement des mesures administratives, telles que confiscations et amendes, sont ordonnées par les autorités de poursuite aux contrevenants. L'effet dissuasif de la menace de ces sanctions pénales apparaît donc minime pour les malfaiteurs, surtout lorsque l'on sait combien le trafic de faune peut rapporter. Il est nécessaire que la Suisse adopte une politique de répression plus ferme contre les trafiquants, comparable à ses voisins européens, afin d'éviter qu'elle ne devienne une plaque tournante du trafic illicite de faune. Une augmentation des sanctions pénales en cas d'infraction grave est également souhaitée, car elle permettrait de considérer cette dernière comme un crime et rendrait l'*UNTOC* applicable. Or, l'on sait actuellement que le commerce en masse de trafic illicite de faune est perpétré par des groupes criminels actifs dans plusieurs régions du monde.

Enfin, peu de données sont recueillies en matière d'infraction envers la *LCITES* et la recherche sur cette forme de criminalité en Suisse est rendue compliquée par la difficulté d'obtenir des informations sur ce phénomène. La collecte de données dans ce domaine favorise une meilleure compréhension du mode de fonctionnement du trafic illicite de faune et donc permet de développer des stratégies ciblées et efficaces.

Bibliography

- Bradbury, Lisa (Suisse, OSAV), email a Soumeya Ferro-Luzzi, *Re:Demande de données/statistiques LCITES*, 22 février 2019
- Chang-Ryung Han, *Étude relative à la perception du commerce illégal d'espèce sauvages par les Administrations douanières*, document de recherche de l'OMD n°34, Bruxelles: World Customs Organization, 2014
- CITES Secretariat, 'The CITES species' (Web page, 2 janvier 2017) <<https://www.cites.org/eng/disc/species.php>>
- Del Vecchio, Donatella et Urs Bartenschlager, 'Saisies dans les aéroports de Genève et de Zurich, des civilles retrouvent les eaux douces', *Administration fédérale des douanes: Forum D* (Blog Post, 22 février 2019) <<https://www.ezv.admin.ch/ezv/fr/home/documentation/publications/forum-d-le-magazine-de-la-douane-suisse/nah-dran/beschlagnahme-glasaale-wieder-im-wasser.html>>
- Eicker, Andreas et al, *Verwaltungsstrafrecht und Verwaltungsstrafverfahrensrecht*, Berne: Stämpfli, 2012
- Falk, Harriet et al, 'Illegal import of bushmeat and other meat products into Switzerland on commercial passenger flights' (2013) 32(3) *Revue scientifique et technique* 727
- Kocher, Martin et Clavadetscher Diego (edit.), *Zollgesetz (ZG)*, Berne: Stämpfli, 2009
- Mikuriya, Kunio, 'Illicit Wildlife Trade and the Role of Customs' (2016) 12(1) *University of Pennsylvania Asian Law Review* 55
- OMD, 'Réseau douanier de lutte contre la fraude (CEN)' *CEN Suite* (Web page, 2019) <<http://www.wcoomd.org/fr/topics/enforcement-and-compliance/instruments-and-tools/cen-suite/cen.aspx>>
- ONU, CESNU, *Crime prevention and criminal justice responses against illicit trafficking in endangered species of wild fauna and flora*, UN Doc E/RES/2011/36 (28 juillet 2011)
- Suisse, Administration fédérale des douanes, 'La douane de l'aéroport de Zurich saisit la quantité record de 262 kg d'ivoire' (Web page, 24 août 2015) <<https://www.admin.ch/gov/fr/start/dokumentation/medienmitteilungen.msg-id-58228.html>>
- Suisse, Administration fédérale des douanes, *L'administration fédérale des douanes: sécurité pour la population, l'économie et l'État, Faits et chiffres de l'AFD en 2019*, Berne: Administration fédérale des douanes, 2019

Suisse, Conseil fédéral, *Message relatif à la loi fédérale sur la circulation des espèces de faune et de flore protégées*, FF 11.058, 7 septembre 2011

Suisse, OSAV, 'Châles en laine d'antilopes du Tibet' (Web page, 29 mars 2019) <<https://www.blv.admin.ch/blv/fr/home/das-blv/auftrag/vollzug/artenschutz/illegaler-handel/shahtoosh-schals.html>>

Suisse, OSAV, 'Contrôle de conservation des espèces avec autorisation d'importation', *Affaires internationales* (Web page, 19 février 2019) <https://www.blv.admin.ch/dam/blv/fr/dokumente/import-export/import/artenschutz-kontrollstellen-db.pdf.download.pdf/ASK_Kombi%20mit%20EB_FR.pdf>

Suisse, OSAV, 'Division affaires internationale' (Web page, 13 septembre 2019) <<https://www.blv.admin.ch/blv/fr/home/das-blv/organisation/organigramm/int.html>>

Suisse, OSAV, 'L'anguille européenne – une espèce de poisson en danger critique d'extinction' (Web page, 6 février 2019) <<https://www.blv.admin.ch/blv/fr/home/das-blv/auftrag/vollzug/artenschutz.html>>

Suisse, OSAV, 'Service vétérinaire de frontière' *Mandat et missions* (Web page, 12 décembre 2019) <<https://www.blv.admin.ch/blv/fr/home/das-blv/auftrag.html>>

Suisse, OSAV, *CITES Biennial Report Switzerland 2013/2014*, Berne: OSAV, 6 juillet 2015

Suisse, OSAV, *Erläuterung zur Verordnung über den Verkehr mit Tieren und Pflanzen geschützter Arten (VCITES)*, Berne: OSAV, 7 septembre 2011

Suisse, OSAV, *La Suisse et la conservation des espèces sur le plan international*, Berne: OSAV, décembre 2017

Suisse, OSAV, *Tout interdire n'est pas la bonne voie* (octobre 2016) <<https://www.blv.admin.ch/blv/fr/home/dokumentation/nsb-news-list.msg-id-64036.html?>>

Suisse, OSAV, *Viande de brousse: Brochure d'information et d'aide à l'identification*, Berne: OSAV et Tengwood Organization, 20 novembre 2019

UNDOC, *Compilation d'outils pour l'analyse de la criminalité liée aux espèces sauvages et aux forêts*, New York, NY: Nations Unies, 2012

United Kingdom, Department for Environment, Food & Rural Affairs, 'Policy Paper: London Conference on the Illegal Wildlife Trade (October 2018): Declaration Annex' *London Conference on the Illegal Wildlife Trade* (Web page, 28 January 2019) <<https://www.gov.uk/government/publications/declaration-london-conference-on-the-illegal-wildlife-trade-2018/london-conference-on-the-illegal-wildlife-trade-october-2018-declaration>>

UNODC, *World Wildlife Crime Report: Trafficking in Protected Species*, New York, NY: United Nations, 2016

Wellsmith, Melanie, 'Wildlife Crime: The Problems of Enforcement' (2011) 17(2) *European Journal on Criminal Policy and Research* 125

WWF, 'Reportage Souvenirs' (Online publication, 4 juillet 2017) <https://assets.wwf.ch/downloads/2017_07_04_reportage_souvenir_fr.pdf>

Décisions judiciaire

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Suisse, Arrêt du Tribunal administratif fédéral, B-4857/2010, 15 juin 2011

Suisse, Arrêt du Tribunal administratif fédéral, B-4876/2011, 18 juin 2012

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